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Please distribute to the following:

100/300 AREA UNIT MANAGER MEETING
ATTENDANCE AND DISTRIBUTION

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Hadley, Karl A	karl.hadley@wch-rcc.com	H4-21	WCH

100/300 AREA UNIT MANAGERS MEETING
APPROVAL OF MEETING MINUTES

August 9, 2012

APPROVAL: _____ Date 9/13/12
for Mark French, DOE/RL (A3-04)
River Corridor Project Manager

APPROVAL: _____ Date 9/13/12
Briant Charboneau, DOE/RL (A6-33) BLC
Groundwater Project Manager

APPROVAL: _____ Date 9/13/12
Nina Menard, Ecology (H0-57)
Environmental Restoration Project
Manager

APPROVAL: _____ Date 9-13-12
Laura Buelow, Rod Lobos, or Christopher
Guzzetti, EPA (B1-46)
100 Area Project Manager

APPROVAL: _____ Date Sept 13, 2012
Larry Gadbois, EPA
(B1-46)
300 Area Project Manager

100 & 300 AREA UNIT MANAGER MEETING MINUTES

Groundwater and Source Operable Units; Facility Deactivation, Decontamination, Decommission, and Demolition (D4); Interim Safe Storage (ISS); Field Remediation (FR); and Mission Completion

August 9, 2012

ADMINISTRATIVE

- Next Unit Manager Meeting (UMM) – The next meeting will be held September 13, 2012, at the Washington Closure Hanford (WCH) Office Building, 2620 Fermi Avenue, Room C209.
- Attendees/Delegations – Attachment A is the list of attendees. Representatives from each agency were present to conduct the business of the UMM.
- Approval of Minutes – The July 12, 2012, meeting minutes were approved by the U.S. Environmental Protection Agency (EPA), Washington State Department of Ecology (Ecology), and U.S. Department of Energy, Richland Operations Office (RL).
- Action Item Status – The status of action items was reviewed and updates were provided (see Attachment B).
- Agenda – Attachment C is the meeting agenda.

EXECUTIVE SESSION (Tri-Parties Only)

An Executive Session was not held by RL, EPA, and Ecology prior to the August 9, 2012, UMM.

100-F & 100-IU-2/100-IU-6 AREAS (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 2 provides status and information for Field Remediation activities. Attachment 3 provides the Field Remediation Schedule for IU-2/6. No issues were identified and no agreements or action items were documented.

100-D & 100-H AREAS (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 2 provides status and information for Field Remediation activities. Attachment 4 provides the Field Remediation Schedule for 100-D. Attachment 5 provides the Field Remediation Schedule for 100-H. No issues were identified and no action items were documented.

> Agreement 1: Attachment 6 provides Ecology's approval to "Treat the 100-D-100 Chromium Contaminated Soil in Accordance with the 'Treatment Plan and Protocol for Treatment of Chromium-Contaminated Soils, WCH-284, Rev. 2.'" (The soil will be excavated from the floor of the staging pile area that was used for 100-D-100 above contamination level waste, primarily represented by sample number J1P276-A, and may be treated using the Mixture 3 recipe.)
>
> Agreement 2: Attachment 7 provides Ecology's approval to "Treat the 100-D-100 Chromium Contaminated Soil in Accordance with the 'Treatment Plan and Protocol for Treatment of Chromium-Contaminated Soils, WCH-284, Rev. 2.'" (The soil will be excavated from the floor of the staging pile area that was used for 100-D-100 above contamination level waste, represented by sample number J1P280-A, and may be treated using the Mixture 2 recipe.)

Agreement 3: Attachment 8 provides Ecology's concurrence with reclassifying 100-D-50:3 to "No Action" and agreement with the summary provided for 100-D-50:2. (RL and Ecology agreed that no further interim actions will be taken for the 100-D-50:2 pipelines. Instead, these pipelines will be considered in the final action RI/FS process so that potentially appropriate remedies other than RTD can be considered and evaluated.)

100-N AREA (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 2 provides status and information for Field Remediation activities. Attachment 9 provides status and information for D4/ISS activities at 100-N. Attachment 10 provides the 100-N Area FR Schedule. No issues were identified and no action items were documented.

Agreement 1: Attachment 11 provides Ecology's approval of the processes for FR to utilize or expand and close portions of the D4 AOC and the process for verifying how overburden piles can be used as backfill.

Agreement 2: Attachment 12 provides Ecology concurrence with the "100-N Phase II In-Situ Bioremediation O&M Manual and Test/Performance Monitoring Plan Outline" and the "Facilitated Workshop Minutes."

Agreement 3: Attachment 13 provides a 100-N Ancillary Facilities Removal Action Sampling Determination Form for Buildings 1900-N (100-N-105).

Agreement 4: Attachment 14 provides a 100-N Ancillary Facilities Removal Action Sampling Determination Form for Buildings 1605-NE.

100-K AREA (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 2 provides status and information for Field Remediation activities. Attachment 15 provides a status of the 100-K Sludge Treatment Project and the 100-K Facility Demolition and Soil Remediation projects. Attachment 16 provides a schedule for Field Remediation at the 100-K Area. No issues were identified and no agreements or action items were documented.

100-B/C AREA (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 2 provides status and information for Field Remediation activities. Attachment 17 provides a schedule for Field Remediation at 100-B/C Area. No issues were identified and no agreements or action items were documented.

300 AREA – 618-10/11 (GROUNDWATER, SOILS)

Attachment 1 provides status and information for groundwater. No issues were identified and no agreements or action items were documented.

300 AREA - GENERAL (GROUNDWATER, SOILS, D4/ISS)

Attachment 1 provides status and information for groundwater. Attachment 18 provides status of the 300 Area Closure Project activities. No issues were identified and no agreements or action items were documented.

MISSION COMPLETION PROJECT

Attachment 19 provides status and information regarding the Orphan Sites Evaluations, Long-Term Stewardship, River Corridor Baseline Risk Assessment, the Remedial Investigation of Hanford Releases to the Columbia River, and a Document Review Look-Ahead. No issues were identified and no agreements or action items were documented.

5-YEAR RECORD OF DECISION ACTION ITEM UPDATE

No changes were reported to the status of the CERCLA Five-Year Review action Items. No issues were identified and no agreements or action items were documented.

Attachment A

100/300 AREA UNIT MANAGER MEETING
ATTENDANCE AND DISTRIBUTION
August 9, 2012

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Attachment B

100/300 Area UMM
Action List
August 9, 2012

Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Status
O	100-181	RL	J. Hanson	100-HR	DOE will provide Ecology with a briefing on the applicability and status of bioremediation of chromium and the associated feasibility studies.	Open: 4/14/11; Action:
O	100-193	RL	M. Thompson	100-N	At the next UMM, DOE will discuss the potential sources of total organic carbon detected at well 199-N-165 down-gradient from the 1324-N/NA treatment, storage, and/or disposal units.	Open: 1/12/12; Action:
O	100-194	RL	M. Thompson	100-K	DOE will provide EPA and Ecology with the references to support the assumptions regarding the number of years required for habitat reestablishment.	Open: 4/12/12; Action:
O	100-195	RL	R. Guercia	300	DOE will determine if placing inert demolition debris in excavations as backfill triggers any landfill closure requirements.	Open: 7/12/12; Action:
O	100-196	RL	J. Neath	100-D	DOE will determine if the ISRM Pond had been incorporated into the WIDS database, and if not, to finalize a discovery site checklist and get the site into WIDS via the MP-14 process.	Open: 7/12/12; Action:

Attachment C

100/300 Area Unit Manager Meeting
August 9, 2012
Washington Closure Hanford Building
2620 Fermi Avenue, Richland, WA 99354
Room C209; 2:00p.m.

Administrative:

- Approval and signing of previous meeting minutes (July 12, 2012)
- Update to Action Items List
- Next UMM (9/13/2012, Room C209)

Open Session: Project Area Updates - Groundwater, Field Remediation, D4/ISS:

- 100-F & 100-IU-2/6 Areas (Greg Sinton/Tom Post/Jamie Zeisloft)
- 100-D & 100-H Areas (Jim Hanson/Tom Post/Elwood Glossbrenner)
- 100-N Area (Joanne Chance, Rudy Guercia, Mike Thompson)
- 100-K Area (Jim Hanson, Jamie Zeisloft, Tom Teynor)
- 100-B/C Area (Greg Sinton, Tom Post)
- 300 Area - 618-10/11 exclusively (Jamie Zeisloft)
- 300 Area (Mike Thompson/Rudy Guercia)
- Mission Completion Project (John Sands)

Special Topics/Other

- 5-Year Record of Decision Action Item Update (Jim Hanson)

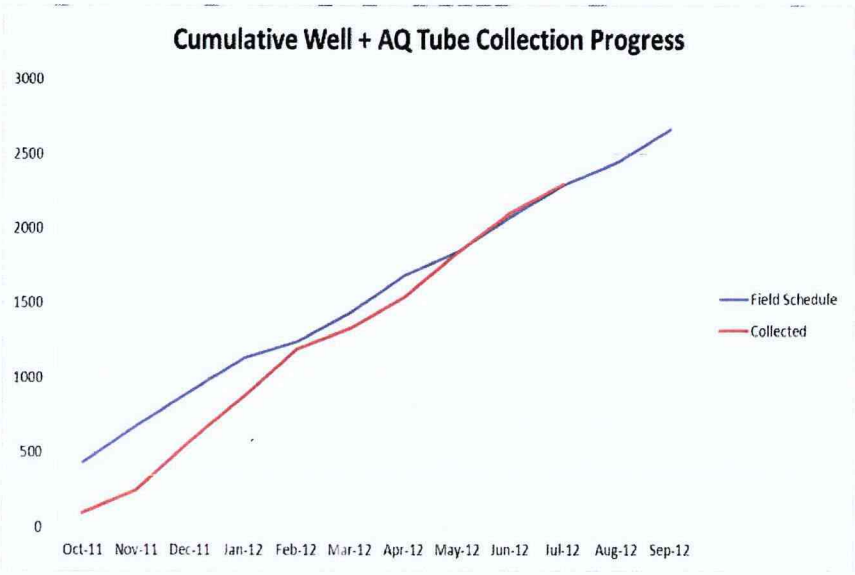
Adjourn

Attachment 1

100/300 Areas Unit Managers Meeting
August 9, 2012

General information on Groundwater Sampling

The wells sampled successfully are reported in a table on the last page of this handout. FY 2012 sampling progress is described in the figure at the right. To account for the optimization that occurs during the sample scheduling, sample events (or well trips) are now being reported, rather than each specific sample that is scheduled. This is to accommodate the current database architecture of HEIS and the scheduling tools.



Hexavalent Chromium Groundwater Plumes in 100 Area – David Dooley / Lorna Dittmer

(M-016-110-T01, DOE shall take actions necessary to contain or remediate hexavalent chromium groundwater plumes in each of the 100 Area NPL operable units such that ambient water quality standards for hexavalent chromium are achieved in the hyporheic zone and river water column.)
Schedule Status – On schedule.

- White paper is under development to discuss with the Regulators.

Cross Cutting RI/FS & PP Issue

- The team is evaluating the RI decision to incorporate the previous irrigation based soil screening levels and conversion of those to PRGs. The change will result in a rework of the RI/FS Report primarily Chapters 5 and 9, the alternative cost appendix, and where required, site specific modeling will be performed. An estimate is being prepared to determine the level of effort required to incorporate this decision and the necessary schedule adjustments.

100-FR-3 Groundwater Operable Unit – Bert Day / Mary Hartman

(M-015-64-T01, 12/17/2011, Submit CERCLA RI/FS Report and Proposed Plan for the 100-FR-1, 100-FR-2, 100-FR-3, 100-IU-2, and 100-IU-6 Operable Units for groundwater and soil.)
Schedule Status – Behind schedule. The planned delivery date for the 100-F/IU Draft A RI/FS Report to the regulators is December 28, 2012 (see attached CERCLA Decision Documents schedule).

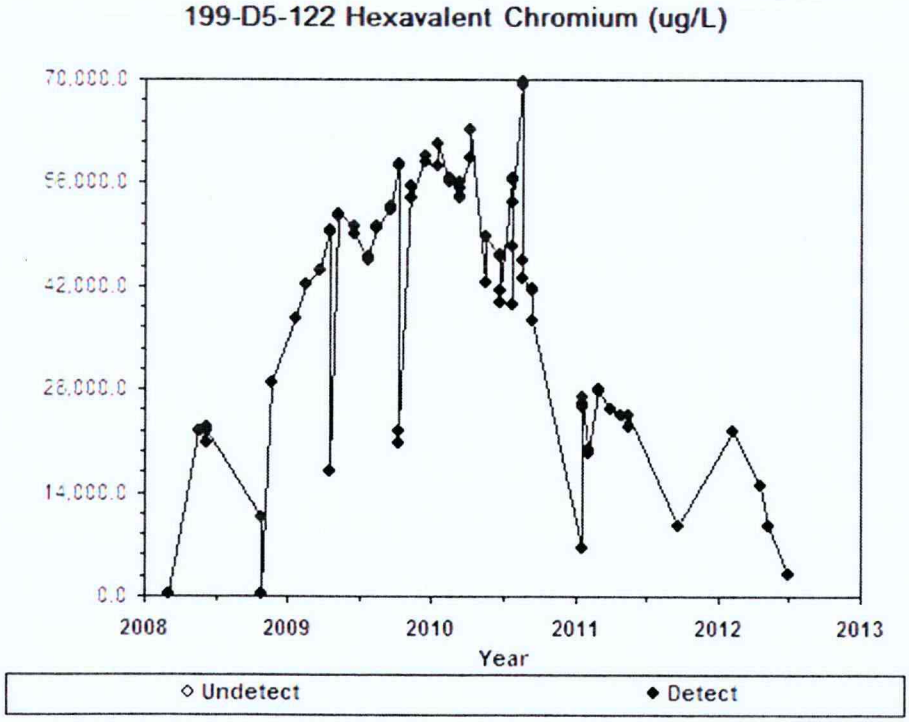
- CERCLA Process Implementation: RI/FS report development continues.
  - The team is planning a workshop with EPA on August 29, 2012. The workshop will focus on the recommended preferred alternative for groundwater and soils remediation.
  - The project team is finalizing the chapters and appendices of the RI/FS report and began preparing for the Connectivity Review which is scheduled for the week of August 6, 2012.
  - The team is completing the activity to revise the RI/FS to include more recent groundwater data collected through the end of 2011.
  - RI/FS & PP preparation continues. The format and structure of the Proposed Plan will be similar to the 100-K Proposed Plan. The team initiated preparation of the proposed plan.
  - The team is incorporating the applicable 100-K resolutions into the document for consistency
- Groundwater monitoring: Nothing to report. No additional groundwater monitoring scheduled for the remainder of FY 2012.

100/300 Areas Unit Managers Meeting
August 9, 2012

100-HR-3 Groundwater Operable Unit – Bert Day / John Smoot

(M-15-70-T01, 11/24/2011, Submit feasibility study report and proposed plan for the 100-HR-1, 100-HR-2, 100-HR-3, 100-DR-1 and 100-DR-2 operable units for groundwater and soil.)
Schedule Status – Behind schedule. The planned delivery date for the 100-D/H Draft A RI/FS Report to the regulators is December 14, 2012 (see attached CERCLA Decision Documents schedule).

- Conducted RI/FS briefing on D/H technologies and alternatives with Ecology on August 2, 2012.
- CERCLA Process Implementation: RI/FS & PP preparation continues. The team is incorporating the applicable 100-K resolutions into the document for consistency. The internal senior management review was completed July 27.
- Remedial Actions:
  - Operations continue at DX and HX pump-and treat system. July 1 through 31, 2012 performance:
    - The systems treated 57 million gallons
    - The system removed 33 kg of hexavalent chromium
- Monitoring & Reporting: Concentrations of hexavalent chromium continue to drop in the 100-D Hotspot area southeast of the 182-D Reservoir. Well 199-D5-122 is the well with the largest historic Cr(VI) concentrations. The current concentrations are significantly reduced from the maximum value of 69,700 µg/L on August 18, 2010 to 3,040 µg/L on June 27, 2012.



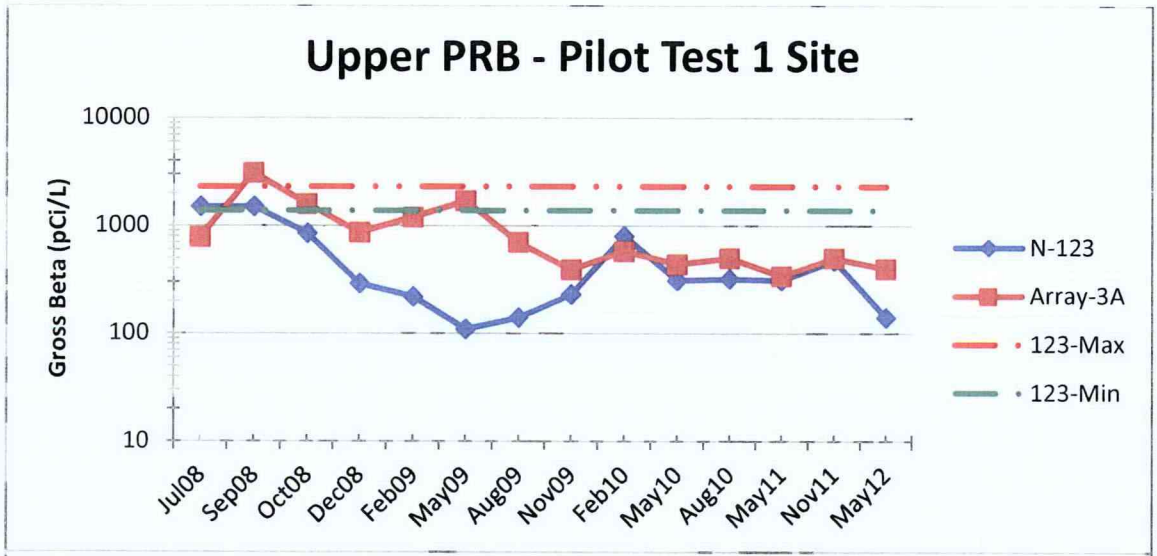
100-NR-2 Groundwater Operable Unit – Marty Doornbos / Deb Alexander

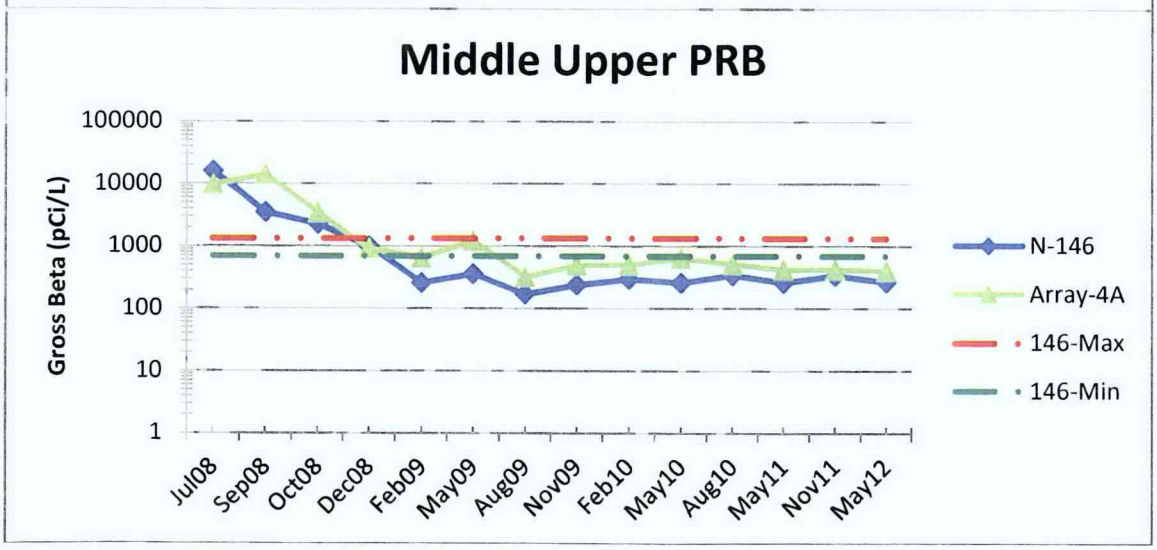
(M-015-62-T01, 9/17/2012, Submit a Feasibility Study [FS] Report and Proposed Plan [PP] for the 100-NR-1 and 100-NR-2 Operable Units including groundwater and soil. The FS Report and PP will evaluate the permeable reactive barrier technology and other alternatives (petroleum remediation) and will identify a preferred alternative in accordance with CERCLA requirements.

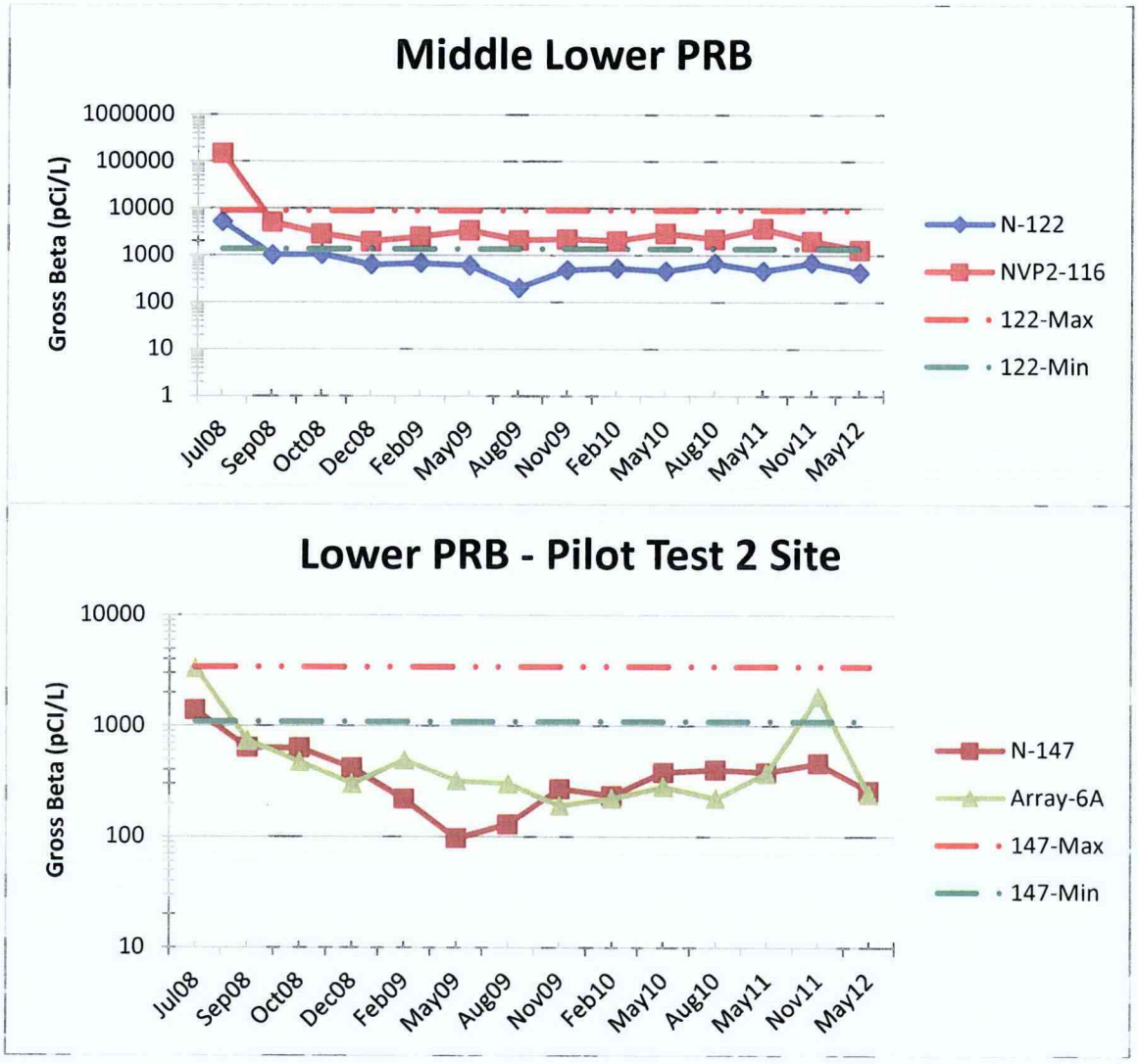
Schedule Status –Behind schedule. The planned delivery date for the 100-NR-2 OU Draft A RI/FS Report to the regulators is currently scheduled for December 28, 2012 to accommodate comments from the 100-K documents.

- CERCLA Process Implementation
  - Work continues on preparation of the RI/FS report. CHPRC internal review concluded and development of the decisional draft is underway. Several changes are being incorporated to be consistent with the agreements made in the 100K RI/FS.
  - Meetings were held with Ecology on July 10 to discuss the preliminary remedial alternatives and on July 25 to present the preliminary groundwater risk results. Follow-on meetings have been scheduled for August.

- Performance Monitoring - Apatite Permeable Reactive Barrier (PRB)
  - Original Barrier – plots below are from the four sections of the original barrier

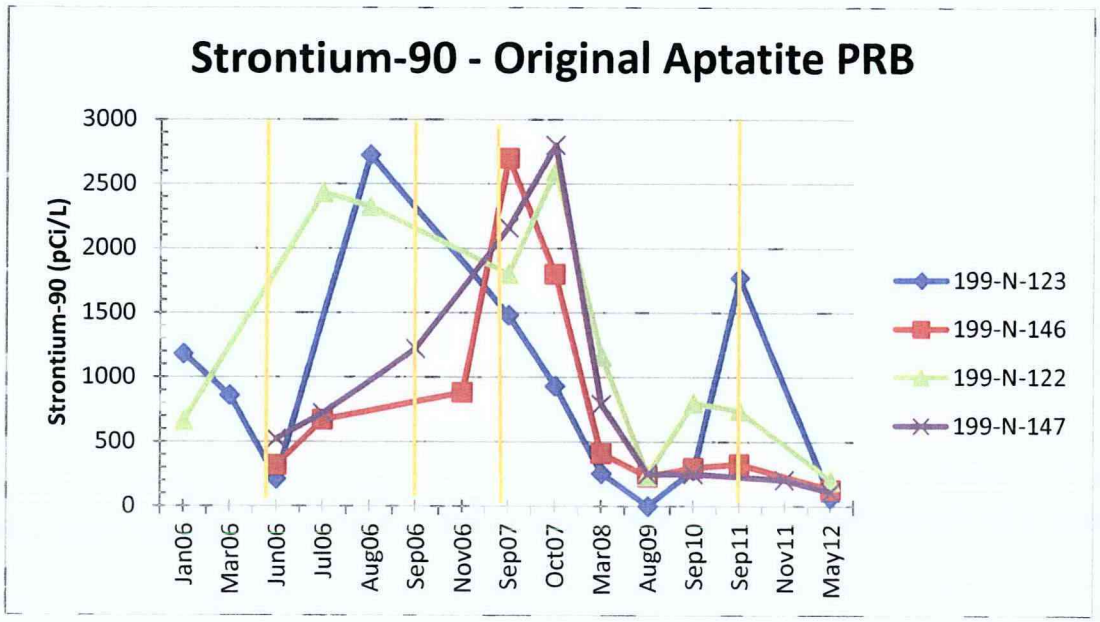




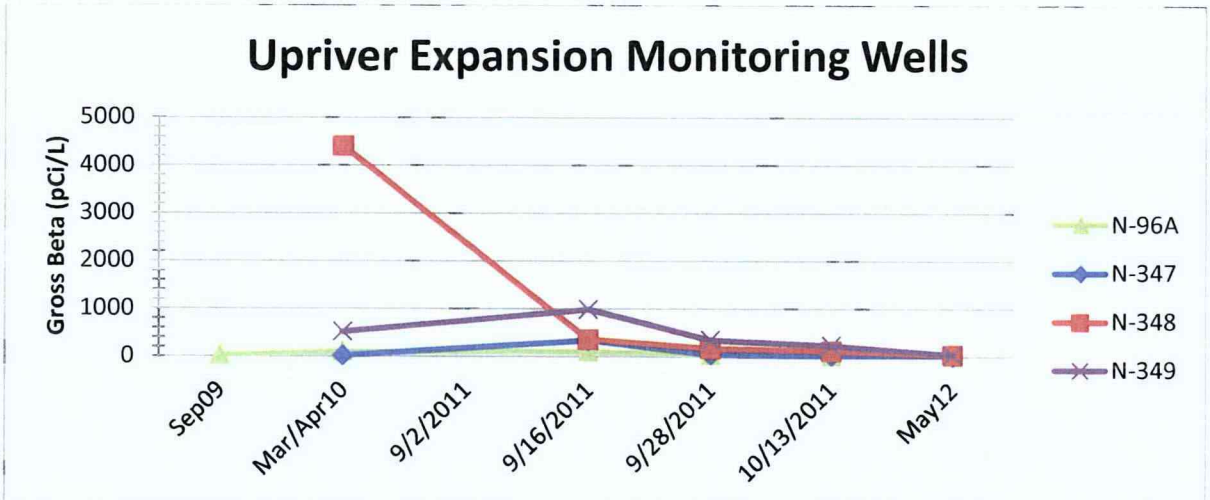


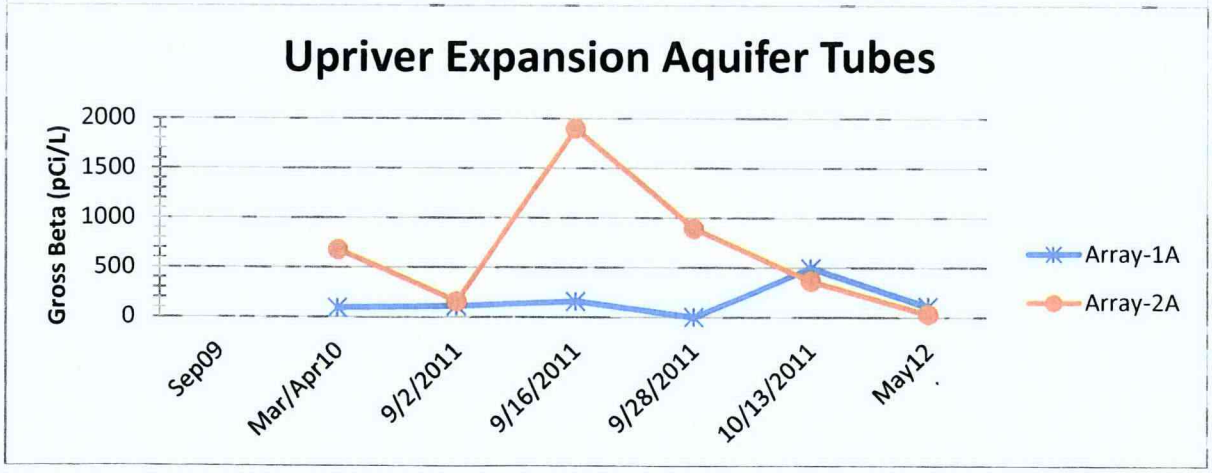
All trends are below the minimum pre-treatment values at this time. The effects of the upriver and down river expansion injections performed in September of 2011 can be seen on both ends of the original barrier, upriver at well 199-N-123 and down river at well 199-N-147. The nearest aquifer tubes, N116Array-3A and N116Array-6A were also affected by the expansion injections.

Most monitoring points are still showing a 90% or greater reduction in gross beta measurements. The graph below illustrates strontium-90 values in 2006 (pre-injection) through the May 2012 sample event. The yellow vertical lines are approximate times injections occurred. It is obvious in this graph that values fluctuate with river levels, but the trend has been predominately downward since the end of injections in 2008.

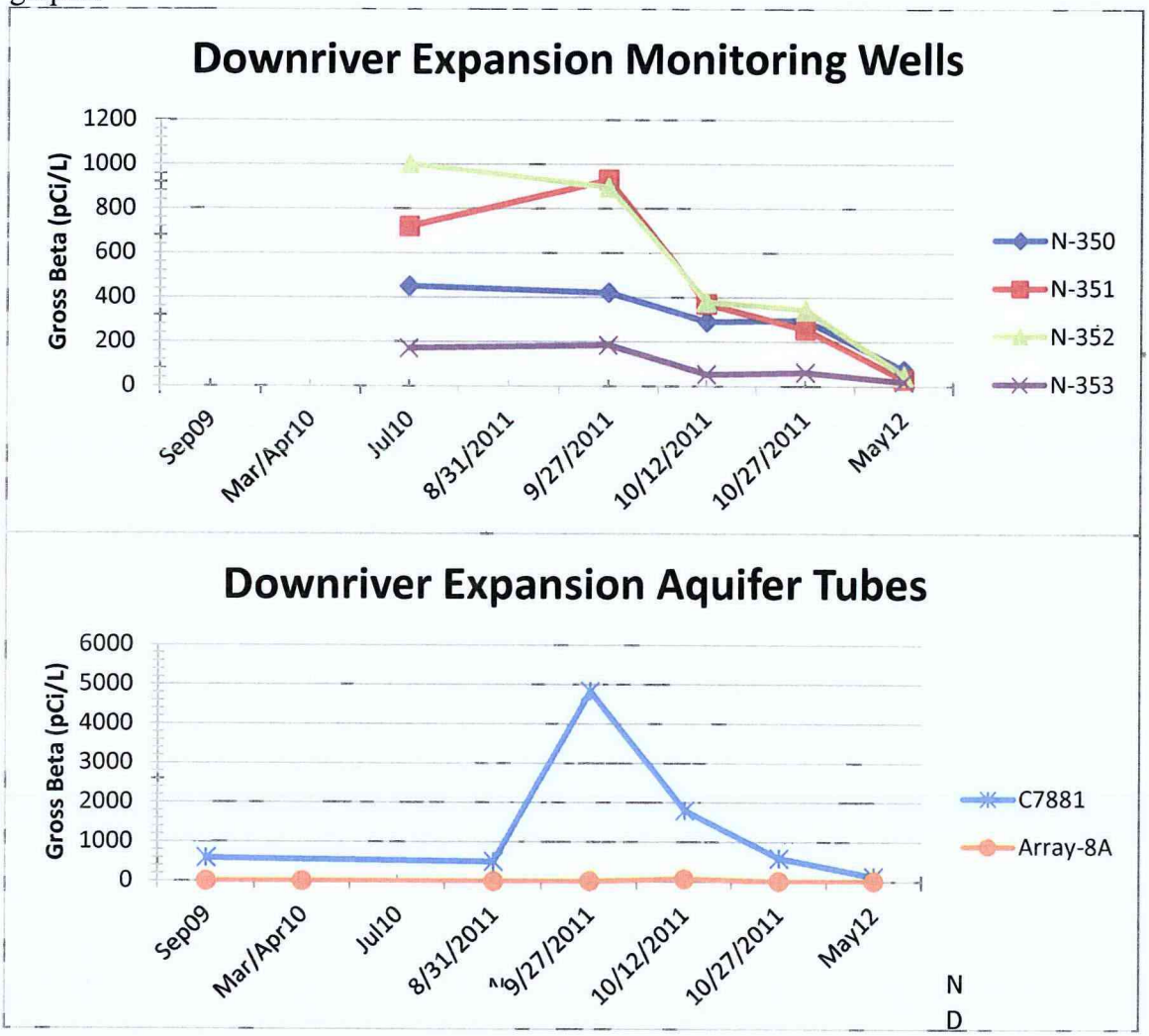


- Data from the September 2011 upriver barrier expansion is presented in the following graphs:





- Data from the September 2011 downriver barrier expansion is presented in the following graphs:



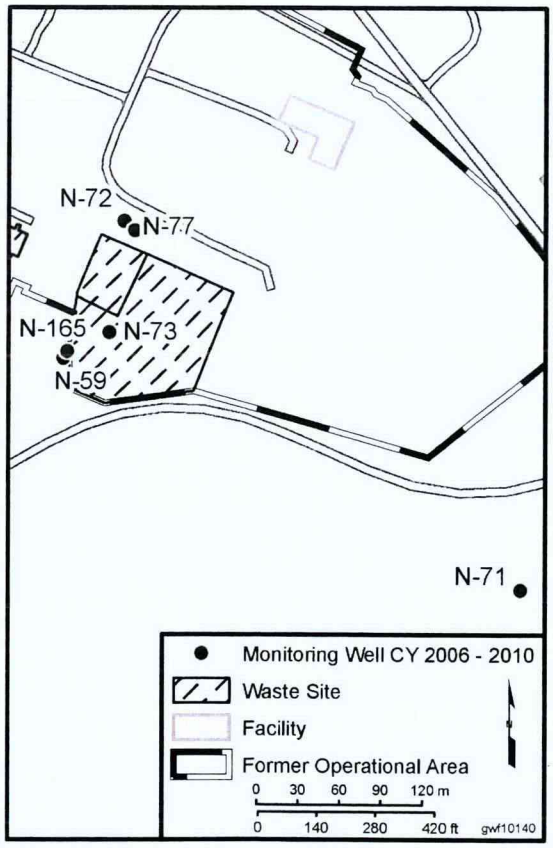
After all of the injections, a spike in metals/cations, anions, and specific conductance was seen as expected, based on previous experience with injection behavior. There was also the expected decrease in dissolved oxygen and oxidation-reduction potential (ORP) measurements. Most metals/cations and anions have returned to near or below pre-injection levels. Some exceptions to this are continued elevated sodium and calcium levels. Phosphate is also still detectable in most locations, which means the apatite-forming reaction is ongoing. Some monitoring points are still exhibiting lower dissolved oxygen levels and/or low to negative ORP measurements. This is an expected result of the geochemical process. Overall, gross beta and strontium-90 values are decreasing. The next monitoring event for all three sections of barriers will be this fall (October/November) at low river stage.

- <u>RCRA Monitoring – 1324-N</u>
  - Sampling was been completed for the five RCRA wells (199-N-165, 199-N-71, 199-N-72, 199-N-73, and 199-N-77) and wells 199-K-151 and 199-K-152 for the expanded analyte list: Field parameters (pH, specific conductance, temperature, dissolved oxygen, and oxidation-reduction potential), Metals (filtered and unfiltered), Anions, VOCs, SVOAs, PAHs, Total coliform, TPH-Diesel and Gasoline, and Alkalinity. All these analytes were collected with the exception of the TOC for the 100 K wells, which has been added to the

October sampling event. Data available thus far is highlighted below for key monitoring constituents:

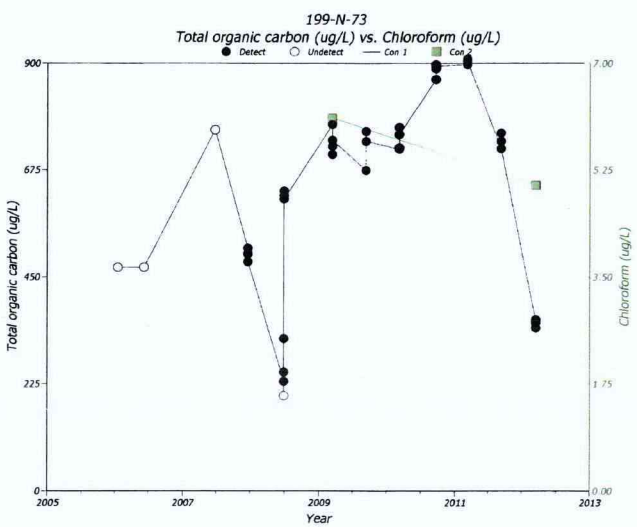
			VOA	PAH			
	TOC	TOX	Chloroform	Anthracene	Coliform	TPH-D	TPH-G
Well	µg/L	µg/L	µg/L	µg/L	Colonies/100 mL	µg/L	µg/L
199-N-71	208-228 B	10.1B	2.30 J	0.053 J	1.0 U	70 U	50 U
199-N-72	414-430	6.27-8.64 B, 16.6	4.30 J	ND	1.0 U	70 U	50 U
199-N-73	343-361	13.5 B, 13.5 B, 15.6, 17.6	5.0	ND	1.0 U	70 U	50 U
199-N-165	891-914	13.0 B, 13.3 B, 16.4, 19.1	5.0	0.054 J	1.0 U	70 U	50 U
199-K-151	NM	NM	3.30J	ND	1.0 U	70 U	50 U
199-K-152	NM	NM	1.80J	ND	1.0 U	80 U	50 U

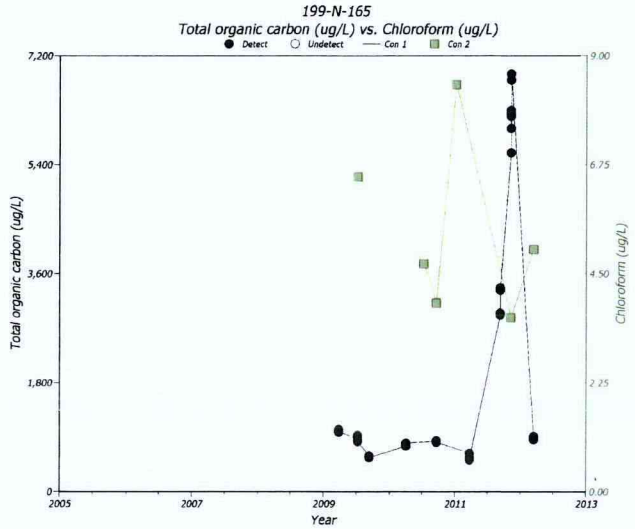
Flags: J = value is estimated
B = value is less than the contractually required detection limit, but greater than the method detection limit
U = not detected
NM = not measured; VOA = volatile organic analyte; PAH = polyaromatic hydrocarbon; TOC = total organic carbon; TOX = total organic halides; TPH-D = total petroleum hydrocarbon-diesel range; TPH-G = total petroleum hydrocarbon-gasoline range



Note: Wells 199-N-71, 199-N-72, 199-N-73, and 199-N-165 are completed in the top of the unconfined aquifer. Well 199-N-77 is completed in the bottom of the aquifer.

Groundwater is slightly alkaline at this site, with all wells having pH greater than 8. Levels of cations/metals and anions are unremarkable, except for the known elevated values for sulfate and nitrate. The only VOA that was detected in any of the wells was chloroform, and it was detected in all of them. The only PAH detected was anthracene, and it was only detected in wells 199-N-71 (the upgradient well) and 199-N-165. There were no detections of coliform bacteria, TPH-D, or TPH-G. The TOC level in 199-N-165 appears to be dropping back to previous levels. Samples will be collected at this location in September, and allow us to see if the downward trend continues in this well. The plots below show TOC and chloroform levels in all four RCRA wells completed in the top of the unconfined aquifer. As shown, there is no clear trend for the values, but they do appear to be occurring in the same locations. Well 199-N-77 also has detections of TOC and chloroform, so they are found throughout the unconfined aquifer at this location. It is possible that there is some correlation between the occurrence of chloroform and the presence of TOC. With no detections of TPHs or coliform bacteria, it does not appear that septic and/or fuel spills are a source. As of this point in time, there is still no clear source for the TOC. The September/ October sampling events at 100-N and 100-K respectively, should provide additional data, to determine if the TOC is moving in from the Treatability Test site in 100-K.



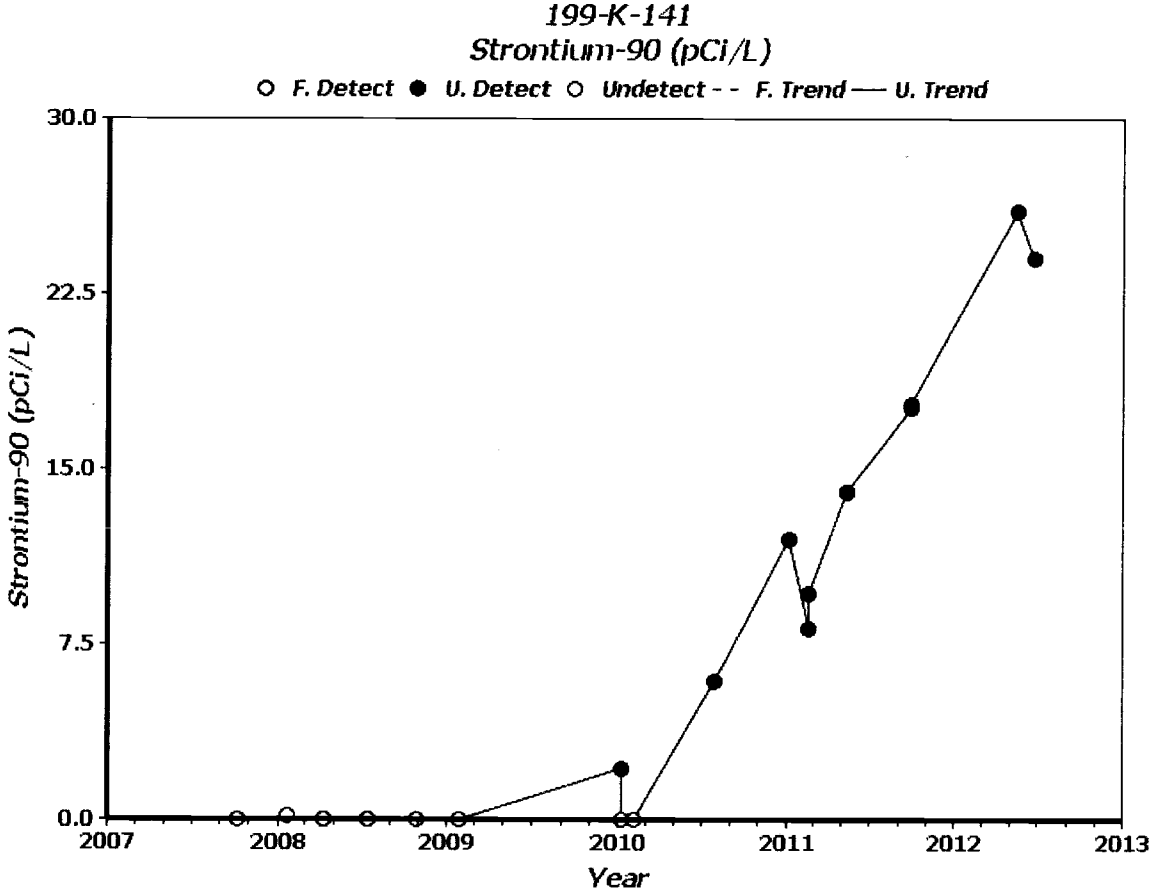


100-KR-4 Groundwater Operable Unit – Bert Day / Chuck Miller

- CERCLA Process Implementation:
  - Proposed Plan: Finalizing document according to resolution of comments with EPA and RL (except for cross cutting issue).
  - Advance Notice, Upcoming Public Comment Period on the Proposed Plan for Cleanup of Hanford's 100-K Area along the Columbia River, was sent via listserver on June 28, 2012.

- Remedial Actions:
  - Operations continue at KX, KR4, and KW pump-and-treat systems. The KR4 system is mid-transition to SIR-700. All three systems are operating with SIR-700 resin with two vessels in each train. July 1 through 31, 2012 performance:
    - The systems treated 44 million gallons.
    - The system removed 3.9 kg of hexavalent chromium

- Monitoring and Reporting:
  - Strontium-90 concentration in extraction well 199-K-141, located downgradient of 105-KE Reactor, decreased slightly in a sample collected 20 June 2012 (i.e., from 26 to 24 pCi/L). This trend has exhibited previous slight decreasing transients as part of the observed upward trend. No special emphasis is placed on the recent change. The trend plot for strontium-90 in well 199-K-141 is shown below. This well, located on the west side of the inferred Sr-90 plume that originated at the 116-KE-3 Fuel Storage Basin Overflow Crib, is expected to continue to capture a portion of that plume and may exhibit higher concentrations in the future.



- Modifications & Expansions
  - All three systems (KR, KX, and KW) are running on SIR-700 resin.
- Issues and Conditions Observed
  - None to report.

100-BC-5 Groundwater Operable Unit – Bert Day/ Mary Hartman

(M-015-68-T01, 11/30/2011, Submit CERCLA RI/FS Report and Proposed Plan for the 100-BC-1, 100-BC-2 and 100-BC-5 Operable Units for groundwater and soil.)

Schedule Status – Behind schedule. The planned delivery date for the 100-BC Draft A RI/FS Report to the regulators is December 12, 2012 (see attached CERCLA Decision Documents schedule) .

- CERCLA Process Implementation:
  - RI/FS report development continues.
  - The RI/FS team completed the senior review on August 1, 2012 and adjudication of comments is underway.
  - Document processing consisting of editing and formatting will begin on August 6, 2012 and delivery of the Draft RI/FS for RL review is planned for August 23, 2012.
  - The team is planning a workshop with EPA on August 29, 2012. The workshop will focus on the recommended preferred alternative for groundwater and soils remediation.

- The team prepared a presentation for RL internal use to begin discussions on selection of the preferred alternative. The presentation was delivered on July 24, 2012 and the team is supporting RL with internal discussions and selection of the preferred alternative.
- The team is incorporating the applicable 100-K resolutions into the document for consistency.
- Proposed Plan: The format and structure of the Proposed Plan will be similar to the 100-K Proposed Plan. The team initiated preparation of the proposed plan.

- Monitoring & Reporting
  - The wells downgradient of 100-C-7:1 was sampled July 10. Four other wells also were sampled in July. Analytical results were not available at the time of this writing.

300-FF-5 Groundwater Operable Unit – Marty Doornbos/Virginia Rohay

M-015-72-T01 (due December 31, 2011) "Submit CERCLA RI/FS Report and Proposed Plan for the 300-FF-2 and 300-FF-5 Operable Units for groundwater and soil."

- M-015-72-T01 milestone was completed on December 27, 2011.
- RI/FS report (DOE/RL-2011-99) Draft A delivered to EPA and Ecology on December 27, 2011.
- Proposed Plan (DOE/RL-2011-47) Draft A delivered to EPA and Ecology on December 27, 2011.
  - EPA comments on these documents were received on February 13, 2012. Progress continues on incorporation of the comments into the Draft Rev. 0 RI/FS & PP.
  - The Draft Rev. 0 PP was provided to EPA on July 13, 2012. EPA's technical comments were received on July 24; and EPA's legal and Ecology's comments were received on July 30. Several meetings have been held to resolve comments.

- The 300-FF-5 Groundwater OU includes the groundwater impacted by releases from waste sites associated with three geographic subregions: 300 Area Industrial Complex, 618-11 Burial Ground, and 618-10 Burial Ground/316-4 Cribs. Principal controlling documents are:
  - 300-FF-5 OU operations and maintenance plan (DOE-RL-95-73, Rev. 1, 2002)
  - 300-FF-5 OU sampling and analysis plan (DOE/RL-2002-11, Rev. 2, 2008)
  - 300 Area RI/FS work plan (DOE/RL-2009-30, Rev. 0, 2010)
  - 300 Area RI/FS sampling and analysis plan (DOE/RL-2009-45, Rev. 0, 2010).

- 300 Area Industrial Complex — During the March 2012 UMM, information was provided regarding the unusually high uranium concentrations that were noted at numerous 300 Area wells in samples collected in June 2011 during the period of seasonal high water table conditions. Of particular note was the concentration detected in the sample from well 399-1-17A, which is approximately 30 m south of the 300 Area Process Trenches and 20 m southwest of the 300-15 process sewer spur that conveyed effluents to the process trenches. The positive correlation between water-table elevation and uranium concentration is consistent with the conceptual site model where uranium remains in the lower portion of the vadose zone and is available to be remobilized during periods of high water-table conditions. Since June 2011, these anomalously high concentrations have declined to their more typical seasonal values (Figure 300FF5-1 below, updated through June 2012). Well 399-1-17A was sampled on July 3rd. (Well 399-1-17A is scheduled for sampling in July, August, and September as part of RCRA monitoring of the 300 Area Process Trenches.)

  On May 16, a water line was discovered to be leaking south of the 324 Building. Repairs were completed on May 18. An estimated 20,000 gallons of water was released to the soil column. A plan to monitor the nearest downgradient wells for potential impacts was approved by DOE and

EPA on May 17. The nearest well, 399-4-15, was sampled on May 30. The analytical results for gross beta (20 pCi/L) and gross alpha (23 pCi/L) at well 399-4-15 do not indicate any groundwater impacts (Figure 300FF5-2 below). Well 399-3-20 was sampled on May 15th, the day before the leak was discovered. Results for gross beta (21 pCi/L) and gross alpha (20 pCi/L) at well 399-3-20 are similar to the results at well 399-4-15. Results for gross beta and gross alpha for three wells further downgradient (399-4-9, 399-4-10, 399-4-14) that were sampled on May 21 and 22 also do not indicate groundwater impacts. (Gross beta results were 13 pCi/L, 15 pCi/L, and 33 pCi/L, respectively, and gross alpha results were 15 pCi/L, 15 pCi/L, and 29 pCi/L, respectively.) Well 399-4-15 was sampled on 06/29/12 and 07/25/12. Monthly sampling of well 399-4-15 is planned for 6 months (May through October) to monitor for potential impacts of the leak.

- 618-11 Burial Ground — Tritium, nitrate, and gross beta results for the sample collected on May 3rd at well 699-13-3A, next to the eastern fence line of the Burial Ground, are consistent with previous trends. However, the technetium-99 concentrations appear to have increased from 35 pCi/L on 06/10/10 to 180 pCi/L on 05/03/12. Although these results are well below the technetium-99 Drinking Water Standard of 900 pCi/L, they are being evaluated to confirm the apparent trend. The next sample from this well is scheduled for July.

- 618-10 Burial Ground/316-4 Crib — Groundwater data from June 2012 at well 699-S6-E4L near the 618-10 burial ground show increased concentrations of uranium and of magnesium, a soil fixative (Figure 300FF5-3 below). These data may indicate impacts from excavation activities that began in March 2011 at some of the trenches in the burial ground. Well 699-S6-E4K was sampled on April 27, 2012 and does not indicate a significant increase in the uranium concentration. The monitoring frequency for uranium was increased to monthly at well 699-S6-E4L, and the monitoring frequency for metals (calcium and magnesium, which are soil fixatives) was increased to quarterly at wells 699-S6-E4K and 699-S6-E4L to accommodate excavation and dust control activities as they occur at the burial ground. The increased sampling frequency will be performed for a period of six months. Wells 699-S6-E4L and 699-S6-E4K were sampled on 07/25/12.

Figure 300FF5-1. Uranium Trend Plot (through 06/04/12) for Well 399-1-17A near the 300 Area Process Trenches and North Process Pond.

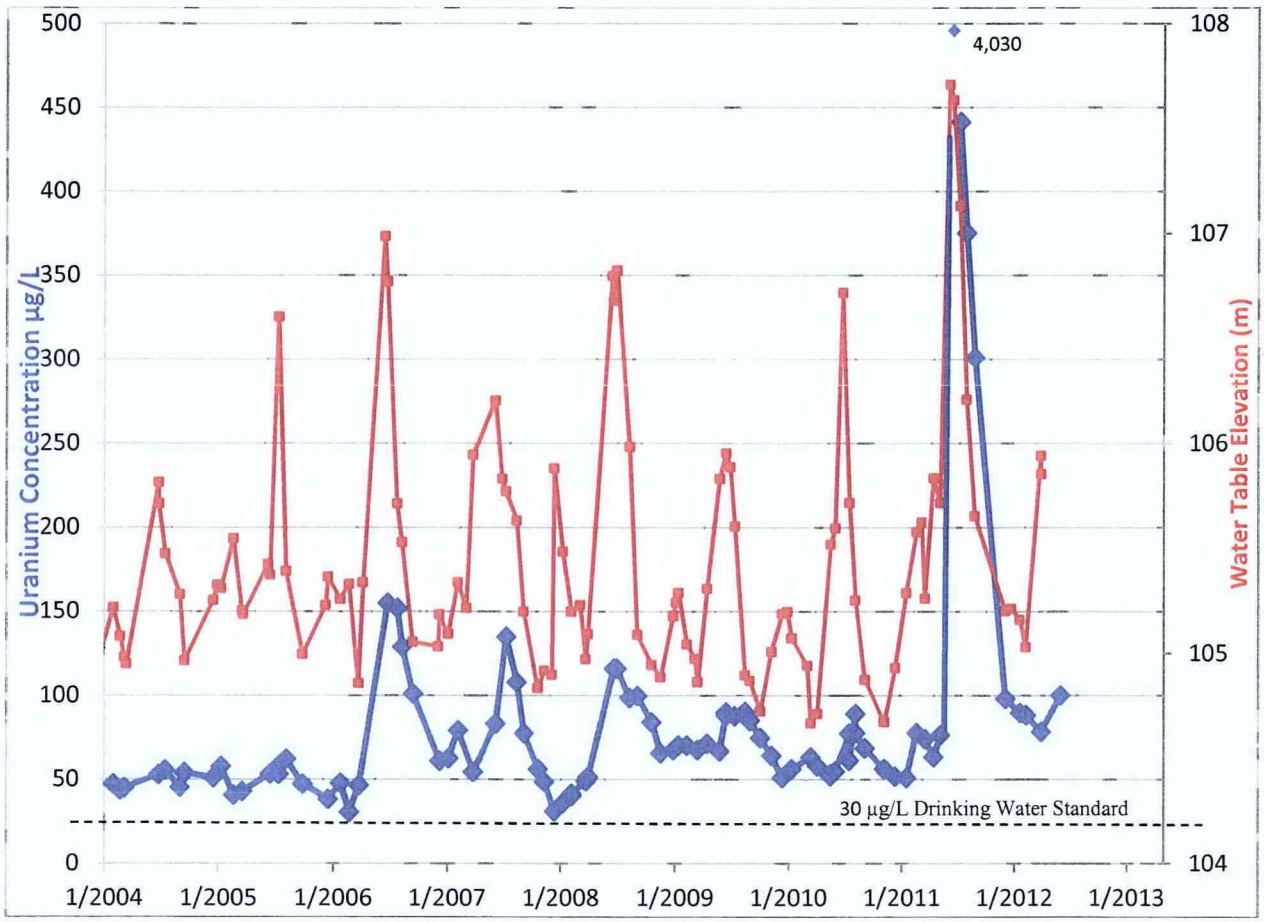
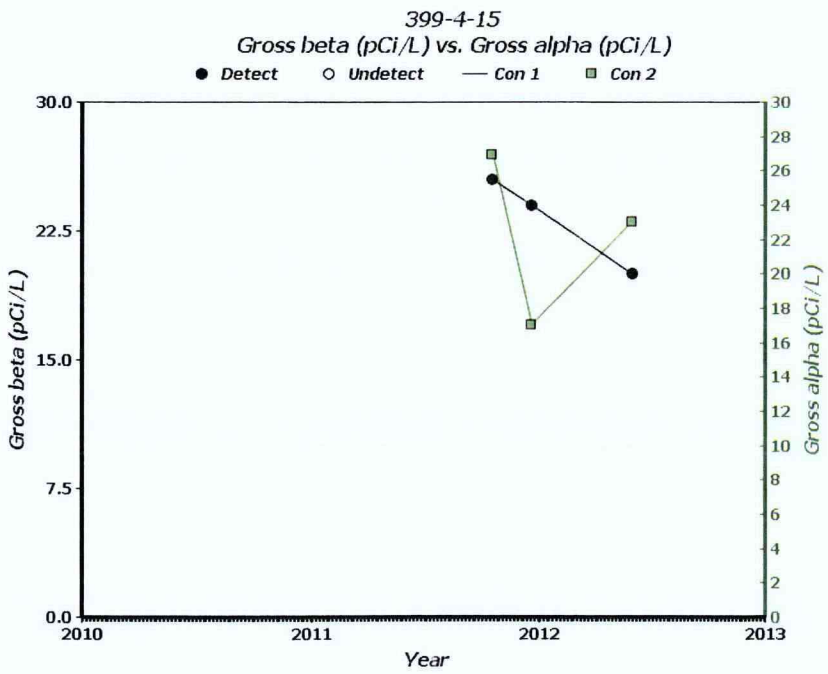


Figure 300FF5-2. Gross Beta and Gross Alpha Trends (through 5/30/12) at Well 399-4-15 near the 324 Building.



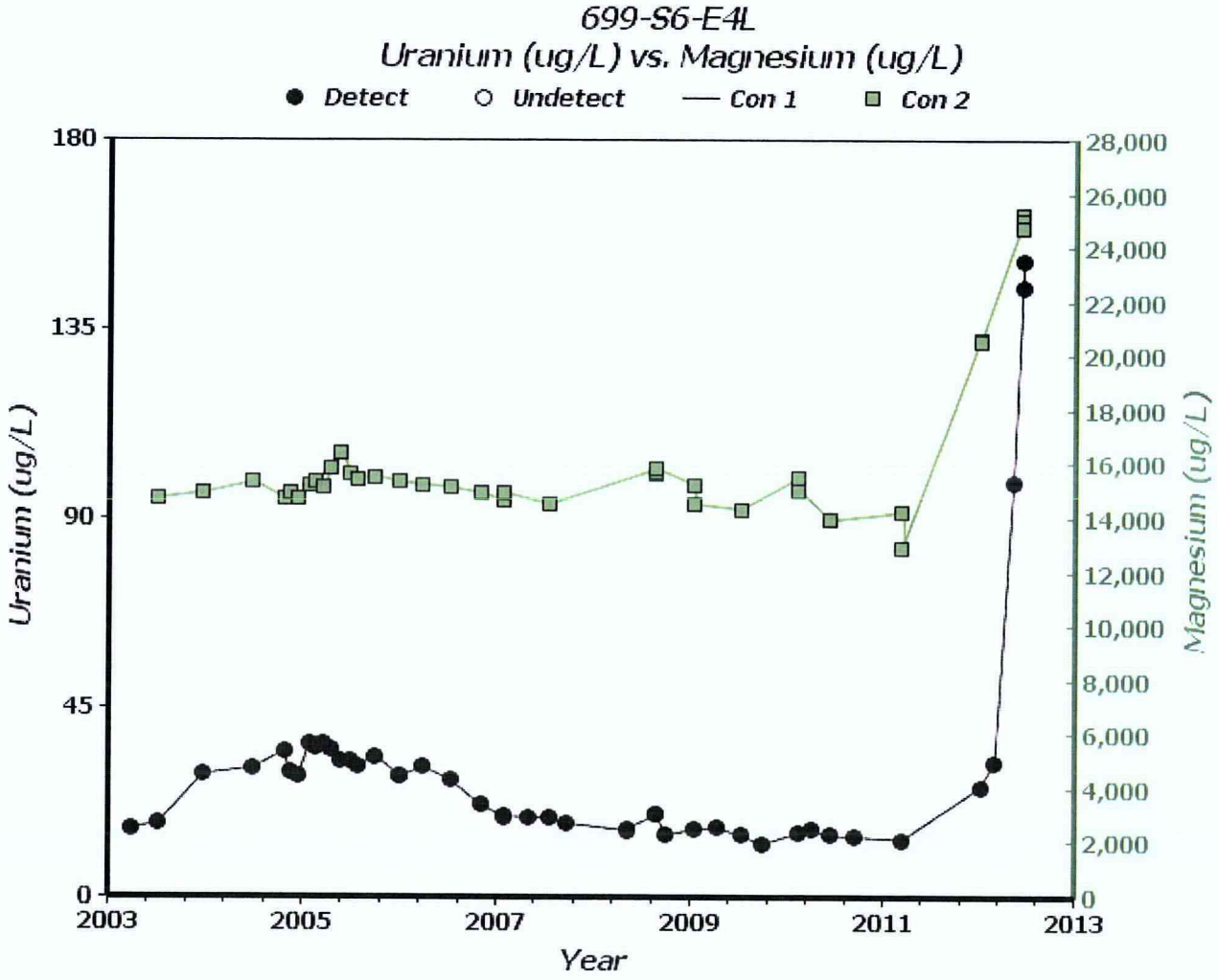


Figure 300FF5-3. Uranium and Magnesium Trends (through 06/14/12) at Well 699-S6-E4L at the 618-10 Burial Ground.

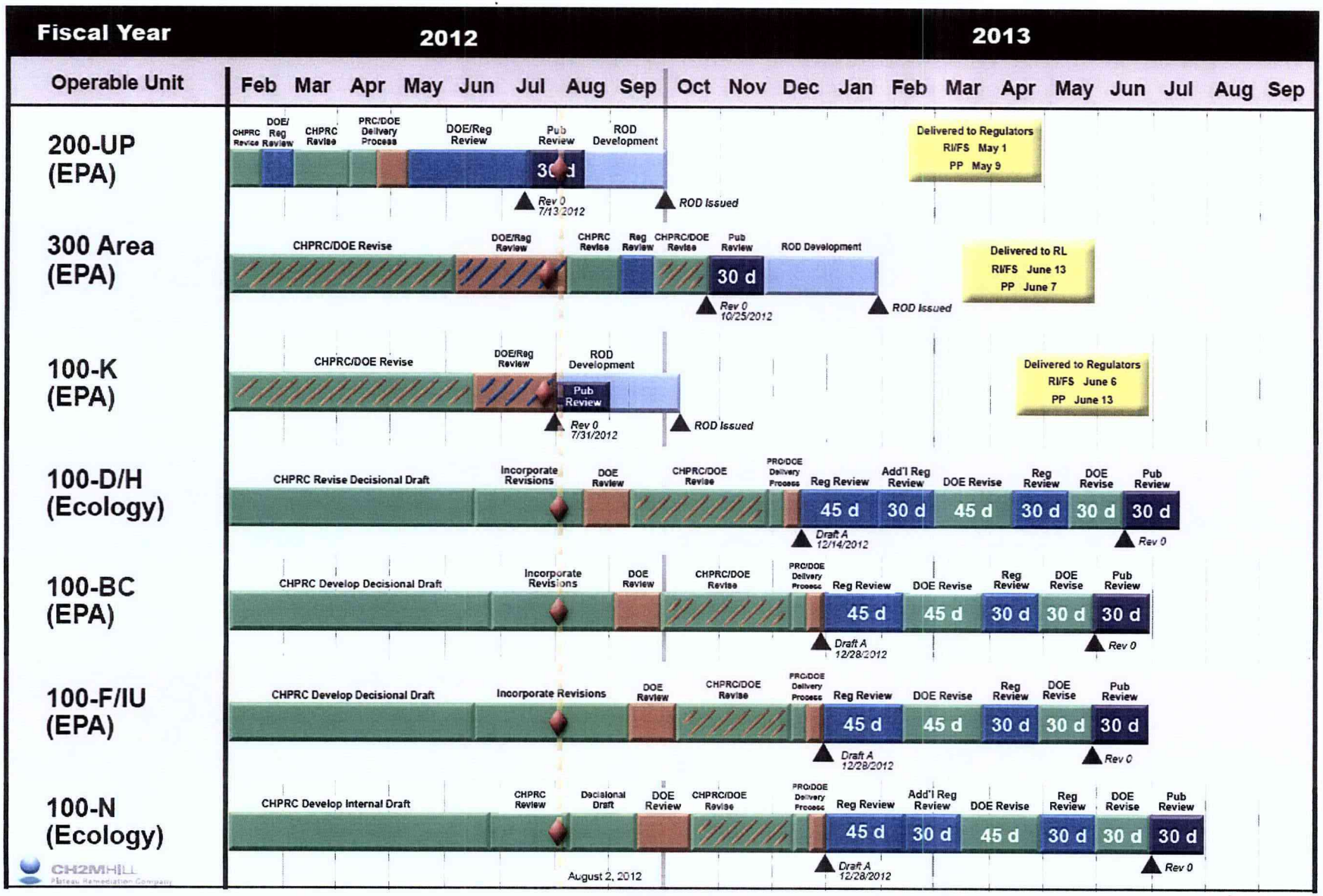
100/300 Areas Unit Managers Meeting
August 9, 2012

Wells sampled in July 2012

Summary of Wells & Aquifer Tubes Sampled in the River Corridor Areas During July 2012						
Week	**100-BC**	**100-K**	**100-N**	**100-D/H**	**100-F**	**300 Area**
02-03 July 12						399-1-17A
09-13 July 12	199-B5-6 199-B4-7 199-B4-14 199-B2-16	199-K-168 199-K-166 199-K-141 199-K-185 Unsuccessful 199-K-173 199-K-34 199-K-196	199-N-165	199-D5-144 199-D5-99 199-D5-119 199-H4-3 199-H2-1 199-D5-127 199-D5-39 199-D5-104		399-1-18A 399-1-18B 399-3-18 399-1-17B 399-1-16A 399-1-16B
16-19 July 12		199-K-157 199-K-32A 199-K-190 199-K-192 199-K-199 199-K-198 199-K-197 199-K-107A 199-K-106A 199-K-111A 199-K-189 199-K-20 199-K-18 199-K-191 199-K-193 199-K-194 199-K-108A 199-K-184 199-K-186 199-K-142		DD-43-2 C6268 DD-42-4 DD-42-3 C6267 C6266 DD-42-2 DD-43-3 Redox-4-3.0 DD-41-1 DD-41-2 DD-39-2 DD-39-1 Redox-3-4.6 Redox-2-6.0 Redox-4-6.0 DD-41-3 Redox-3-3.3		
23-27 July 12	199-B8-9 199-B5-1	199-K-117A 199-K-200 199-K-201 199-K-187 199-K-185	N116mArray-3A N116mArray-6A N116mArray-4A NVP2-116.0 699-84-59	199-D6-3 199-D3-5 199-D8-70 199-D8-71 199-D2-11 199-D3-2 699-99-41 199-D5-122 199-D5-40 199-D5-34 699-100-43B		699-S6-E4K 399-4-15 699-S6-E4L 399-1-10A

Summary of Wells & Aquifer Tubes Sampled in the River Corridor Areas During July 2012						
Week	**100-BC**	**100-K**	**100-N**	**100-D/H**	**100-F**	**300 Area**
				699-101-45 199-D5-143 699-95-51 699-95-48 699-93-48A 699-94-43 699-95-45 699-94-41 199-D5-133 199-D5-142 199-D5-132 199-D5-16 199-D5-15 699-96-52B 699-98-49A 699-98-51 699-97-51A		
30-31 July 12				699-99-44 199-H3-5 199-H1-7 199-H3-9 199-H3-6 199-H3-7 199-H4-16 199-H4-11 199-H4-10 199-H4-13 199-H4-45 199-H4-12A 699-99-41 199-H2-1 699-98-46 699-97-41 199-H3-2A 199-H5-1A 199-H3-3 199-H4-48 199-H4-5 199-H4-65 199-H4-46 199-H4-49		

CERCLA Decision Documents



Schedule does not include changes associated with irrigation and potential change for Ecological PRC

Attachment 2

August 9, 2012 Unit Manager's Meeting
Field Remediation Status

100-B/C

- No field activities being conducted at 100-B/C at this time
- Continue to receive and review 100-C-7:1 sample data
- MSA continued power pole/line disposal (target completion 8/16/12)

100-D

- No field activities being conducted at 100-D at this time
- Completed load-out at 100-D-50:7 Phase 1 & 2, 100D-78 and 100-D-30 Tier 2
- Completed subcontractor demobilization

100-F

- No field activities being conducted at this time, remediation complete at 100-F
- Began removal of power distribution system for previously removed mobile offices

100-H

- No field activities being conducted at this time
- Sample results underneath the 126-H-2 Clearwell showed favorable results

100-K

- No field activities being conducted at this time
- Continued receiving and evaluating close-out sample data at 118-K-1
- Continued discussion on path forward for tritium plume at 118-K-1 trenches N and O

100-N

- No field activities being conducted at 100-N at this time
- Notice to Proceed issued to subcontractor in June for procurement of in-situ bioremediation system
- Continued preparation of closure documents and conducting verification sampling

618-10 Trench Remediation

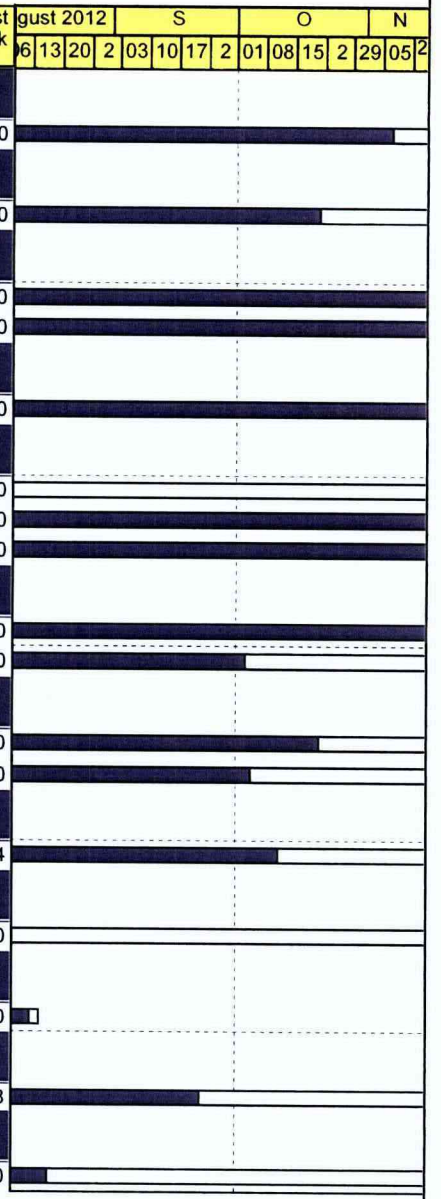
- Continued loadout of soil waste to ERDF
- Continued excavation of trench
- Completed actions and gained approval to return to full operations in Drum Punch #2
- Plan recovery and troubleshooting of DPF #1
- Continue excavation, loadout, and shipment of concrete drums

100-IU-2/6

- All field work has been completed for this fiscal year
- All close-out samples have been taken from remediated sites
- Work on closeout reports has begun

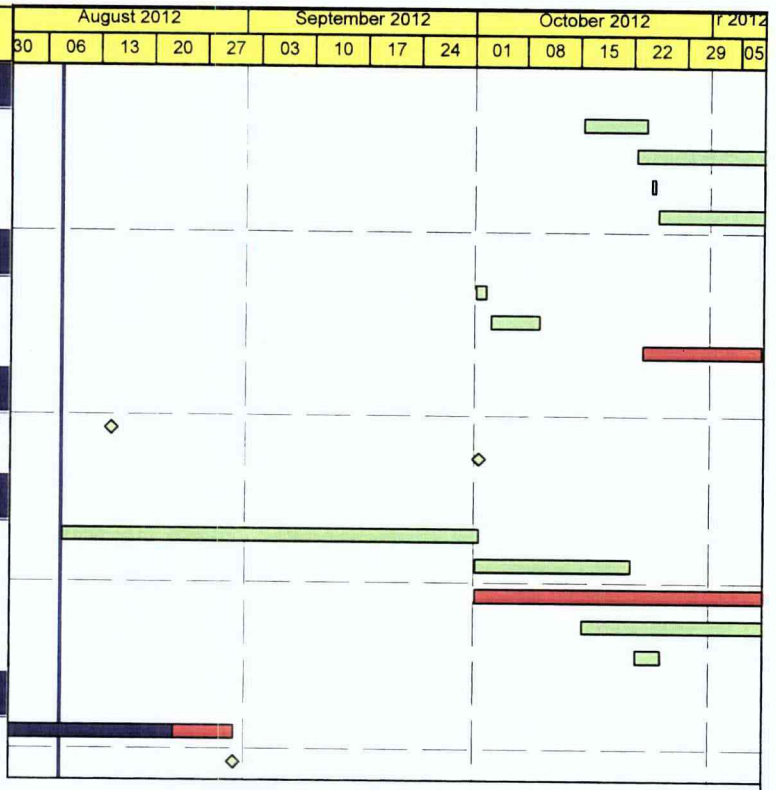
Attachment 3

100-IU-2/6 Contract Closure Schedule		POW LAYOUT					09-Aug-12 11:50
Activity ID	Activity Name	TPA (?)	% Comp.	Rem Dur	Start	Finish	Delta from Last Week
600-298 - Stained/Burned Soil							
RU1U264190	Excavate/Loadout Area #4	Y	75%	3.0	09-Apr-12 A	16-Jan-13	0
600-299 - Batteries							
RU1U264070	Excavate/Loadout Area #2	Y	75%	3.0	16-Jan-12 A	21-Jan-13	0
600-300 - Miscellaneous Debris							
RU1U264250	Excavate/Loadout Area #11	Y	75%	3.0	09-May-12 A	12-Feb-13	0
RU1U264560	Excavate/Loadout Area #1	Y	75%	3.0	29-May-12 A	06-Feb-13	0
600-318 - Wet Cell Batteries							
RU1U264270	Excavate/Loadout Area #3	Y	75%	3.0	25-Apr-12 A	23-Jan-13	0
600-320 - Oil Stains							
RU1U264910	Closeout Sampling	Y	25%	4.0	06-Dec-11 A	28-Feb-13	0
RU1U264810	Excavate/Loadout Area #3	Y	75%	3.0	07-May-12 A	20-Feb-13	0
RU1U264880	Excavate/Loadout Area #9	Y	75%	3.0	23-May-12 A	13-Feb-13	0
600-321 - Suspect ACM Sites							
RU1U264870	Excavate/Loadout Area #1	Y	75%	3.0	10-May-12 A	04-Feb-13	0
RU1U265060	Closeout Sampling	Y	50%	6.0	15-May-12 A	20-Feb-13	0
600-328 - Lead Slag							
RU1U264090	Excavate/Loadout Area #1	Y	75%	3.0	31-Jan-12 A	16-Jan-13	0
RU1U265160	Closeout Sampling	Y	50%	19.0	17-May-12 A	21-Feb-13	0
600-386 - Segment 5 Battery Site							
RU1U265190	Closeout Documentation	N	70%	58.0	11-Jul-12 A	19-Nov-12	4
IU-2/6 Debris Closeout (600-298/299/300)							
RU1U264900	Closeout Sampling	Y	10%	19.0	21-May-12 A	21-Mar-13	0
IU-2/6 Burn Pits #1/2 Closeout (600-306/307/325)							
RU1U265090	Closeout Documentation	Y	98%	4.0	09-May-12 A	14-Aug-12	50
IU-2/6 Burn Pits/Stains Closeout (600-305/308/309/310/311/312/313/314/317/319/324)							
RU1U265130	Closeout Documentation	Y	38%	75.0	30-Jul-12 A	20-Dec-12	18
IU-2/6 Batteries Closeout (600-316/318)							
RU1U265140	Closeout Sampling	Y	30%	17.0	23-May-12 A	05-Mar-13	0



Attachment 4

Activity ID	Activity Name	TPA	% Cmpl	RD	Start	Finish
Excavation						
CBB0537A	Excavation 100-D-72 (3,505 BCM)	N	0%	6	15-Oct-12*	23-Oct-12
100D100A363	Well Decommissioning @ 100-D (REA-184)	N	0%	28	22-Oct-12*	11-Dec-12
CBB0541A	Excavation 100-D-83:3 (182 BCM)	N	0%	1	24-Oct-12	24-Oct-12
CBB0542A	Excavation 100-D-83:5 (14,788 BCM)	N	0%	18	25-Oct-12	28-Nov-12
Backfill						
CBB0403C	Backfill - 100-D-56 (8,632 BCM)	N	0%	2	01-Oct-12	02-Oct-12
RD10D81400	Backfill - 100-D-8 (4 DAYS RE-CONTOURING)	Y	0%	4	03-Oct-12	09-Oct-12
CBC0605C	Backfill - 118-D-2 (54,396 BCM)	Y	0%	10	23-Oct-12	07-Nov-12
Procurement						
RD11DX4070	Subcontractor Procurement - Bids Due	N	0%	0		14-Aug-12*
RD11DX4080	Subcontractor Procurement - Award Subcontract	N	0%	0		01-Oct-12*
Utilities (Electrical)						
100D100A368P	Procure Long Lead Items	N	0%	55	08-Aug-12*	01-Oct-12
100D100A368	13.8 kV Construction	N	0%	21	01-Oct-12*	21-Oct-12
100D100A333	Power Pole Relocation (Field Work)	N	0%	77	01-Oct-12*	16-Dec-12
100D100A369	230 kV Construction	N	0%	63	15-Oct-12*	16-Dec-12
100D100A370	13.8 kV Outage	N	0%	4	22-Oct-12*	25-Oct-12
Utilities Design						
100D100A323	Power Pole Relocation (Design Summary)	N	90%	14	13-Jun-12 A	30-Aug-12
100D100A367	100% Design Submittal	N	0%	0		30-Aug-12*



SPIF Bar | Remaining Work | Critical Remaining Work
Actual Work | Actual Critical Work | Remaining Level of Effort

Data Date: 08-Aug-12

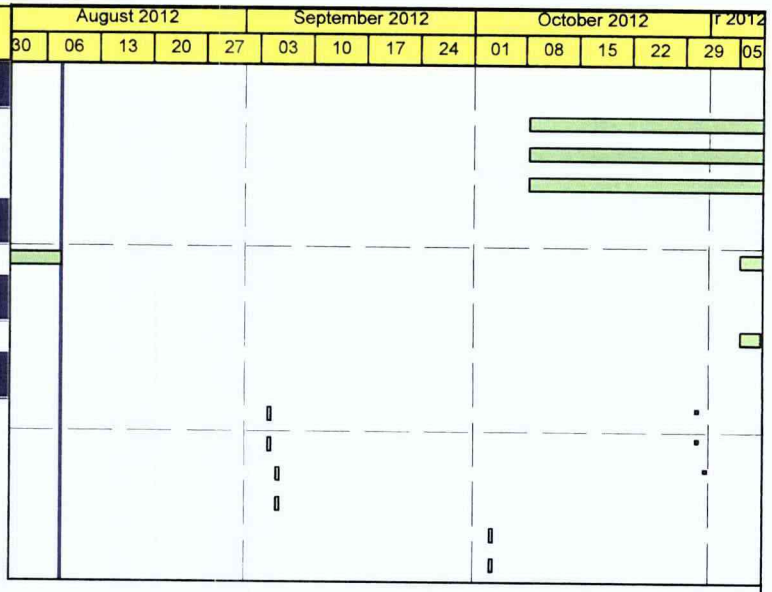
Page 1 of 1

CPP 100-D - Current

TASK filter: 100-DH POW Content.

Attachment 5

Activity ID	Activity Name	TPA	% Cmpl	RD	Start	Finish
Special Projects						
HB512A1	Power Line Relocation (100-H REA 138)	N	0%	48	08-Oct-12*	07-Jan-13
HB512A2	Water Line Reroute (100-H REA 138)	N	0%	90	08-Oct-12*	21-Mar-13
HB512A3	Well Decommissioning (100-H REA 138)	N	0%	36	08-Oct-12*	11-Dec-12
Excavation						
HB511A03	Excavate 100-H-28:2 Phase 1 (135,423 BCMs)	N	43%	136	15-Sep-11 A	11-Jul-13
Backfill						
HB510C1	Backfill - 132-H-3 (17,652 BCM)	Y	0%	3	05-Nov-12*	07-Nov-12
Revegetation						
HB505E10	Order Revegetation - 100H Mud Dauber	N	0%	1	04-Sep-12*	04-Sep-12
HB510E	Order Revegetation - 132-H-3	Y	0%	1	04-Sep-12*	04-Sep-12
HC504E1	Order Revegetation - 128-H-1	Y	0%	1	05-Sep-12*	05-Sep-12
HB506E1	Order Revegetation - 126-H-2	Y	0%	1	05-Sep-12*	05-Sep-12
HB5045E10	Order Revegetation - 118-H-6:5	N	0%	1	03-Oct-12*	03-Oct-12
HB504E10	Order Revegetation - 118-H-6:4	N	0%	1	03-Oct-12*	03-Oct-12



SPIF Bar
Actual Work
Remaining Work
Actual Critical Work
Critical Remaining Work
Remaining Level of Effort

Data Date: 08-Aug-12

Page 1 of 1

CPP 100-H - Current

TASK filter: 100-DH POW Content.

Attachment 6

166886

Approval to Treat the 100-D-100 Chromium Contaminated Soil in Accordance with the "TREATMENT PLAN AND PROTOCOL FOR TREATMENT OF CHROMIUM-CONTAMINATED SOILS, WCH-284, Rev. 2"

This approval applies to approximately 1,000 m3 of chromium contaminated soil described under waste profile WP100D100008. The soil will be excavated from the floor of the staging pile area that was used for 100-D-100 above contamination level (ACL) waste. The area to be excavated is primarily represented by sample number J1P276-A, that had a result of 39.9 mg/L TCLP chromium.

The waste is similar to the material treated in "*TREATMENT PLAN AND PROTOCOL FOR TREATMENT OF CHROMIUM-CONTAMINATED SOILS, WCH-284, Rev. 2*".

This approval allows for the treatment of chromium contaminated soil using the recipe described in Table 1, *Bench-Scale Test Results for the 100-D-56 and 100-C-7*, of the treatment plan under Mixture 3. Mixture 3 has been demonstrated to be effective in treating 100-C-7 soil containing up to 52.6 mg/L chromium. Soil from the floor of the 100-D-100 staging pile area is not unlike the 100-C-7 chromium contaminated soil. Therefore, this approval allows for soil containing up to 52.6 mg/L chromium to be treated using Mixture 3, should such concentrations be encountered during remediation of the staging pile area floor.

Nina M. Menard

Nina Menard
State of Washington Department of Ecology

7/30/12
Date

Tom C Post

Tom Post
U.S. Department of Energy

7/26/12
Date

Attachment 7

166887

Approval to Treat 100-D-100 Chromium Contaminated Soil in Accordance with the "TREATMENT PLAN AND PROTOCOL FOR TREATMENT OF CHROMIUM-CONTAMINATED SOILS, WCH-284, Rev. 2"

This approval applies to approximately 1,000 m3 of chromium contaminated soil described under waste profile WP100D100007. The soil will be excavated from the floor of the staging pile area that was used for 100-D-100 above contamination level (ACL) waste. The area to be excavated is represented by sample number J1P280-A which had a result of 94.1 mg/L TCLP chromium.

The waste is similar to the material treated in "*TREATMENT PLAN AND PROTOCOL FOR TREATMENT OF CHROMIUM-CONTAMINATED SOILS, WCH-284, Rev. 2".*

This approval allows for the treatment of chromium contaminated soil using the recipe described in Table 1, *Bench-Scale Test Results for the 100-D-56 and 100-C-7* of the treatment plan under Mixture 2. Mixture 2 can be used on soil containing up to 278 mg/L chromium.

Tom Post — 7/26/12

Tom Post — **Date**

U.S. Department of Energy

Nina M. Menard — 7/30/12

Nina Menard — **Date**

State of Washington Department of Ecology

Attachment 8

^WCH Document Control 166349

From: Capron, Jason M
Sent: Tuesday, June 26, 2012 10:58 AM
To: ^WCH Document Control
Subject: FW: 100-D-50:2 & 100-D-50:3 Path Forward

Please chronicle.

From: Post, Thomas C [mailto:thomas.post@rl.gov]
Sent: Tuesday, June 26, 2012 10:51 AM
To: Capron, Jason M; Kapell, Arthur; Boyd, Alicia
Cc: Neath, John P; Proctor, Megan L; Winterhalder, John A
Subject: RE: 100-D-50:2 & 100-D-50:3 Path Forward

Jason,

DOE concurs on this approach.

Thank you.

Tom

From: Kapell, Arthur (ECY) [mailto:akap461@ECY.WA.GOV]
Sent: Tuesday, June 26, 2012 7:47 AM
To: Capron, Jason M; Post, Thomas C; Boyd, Alicia
Cc: Neath, John P; Proctor, Megan L; Winterhalder, John A
Subject: RE: 100-D-50:2 & 100-D-50:3 Path Forward

Jason,

As we had discussed yesterday, I am in concurrence with reclassifying 100-D-50:3 to "No Action" provided that the interior of each pipeline has been visually inspected and shown to be free of rust and scale. I am also in agreement with your summary for 100-D-50:2.

Artie Kapell
Nuclear Waste Program
Washington State Department of Ecology
(509) 372-7895 Office
(509) 372-7971 Fax

From: Capron, Jason M [mailto:jmcapron@wch-rcc.com]
Sent: Monday, June 25, 2012 2:39 PM
To: Post, Thomas C; Kapell, Arthur (ECY); Boyd, Alicia (ECY)
Cc: Neath, John P; Proctor, Megan L; Winterhalder, John A
Subject: 100-D-50:2 & 100-D-50:3 Path Forward

Tom, Artie, and Alicia-

Thanks again for our good discussions on the 100-D-50:2 and 100-D-50:3 pipelines. This e-mail is to document our path forward conclusions to help move to the next steps and ensure that I've understood correctly.

First, we will prepare "No Action" interim reclassification paperwork for the 100-D-50:3 pipelines based on process knowledge and visual confirmation of the interior condition of the pipelines. The waste site reclassification form and

supporting information will be submitted for your review/approval per the normal process.

For the 100-D-50:2 pipelines, we will not take any further interim actions. Instead, these pipelines will be considered in the final action RI/FS process so that potential remedies other than RTD (especially end-capping) can be considered and evaluated.

If I've accurately captured the agreement, I'd appreciate your e-mail concurrence. As always, please let me know if you have any questions, and thanks again,

Jason

Attachment 9

100 Area D4/ISS Status
August 9, 2012

100-N

River Structures: All structures 100% complete. Still pending 4:1 re-contouring of the benches (between the ordinary high and low water marks) as previously agreed with agencies. Delay due to high water level in river. Currently working with USACOE at the Priest Rapids Dam to determine if possible to reduce discharges when needed to drop downstream water to a level that facilitates re-contour work entirely out of the water. Also, at the request of DOE, prepared and submitted a proposal to demolish and load out concrete anchor blocks at points south and north of former 181-N River Pumphouse.

105-N Fuel Storage Basin (FSB): 100% complete pending characterization (sampling and analysis) of soil that was under the former fuel storage basin.

105-N/109-N Reactor/Heat Exchanger Buildings (ISS): SSE 100% complete pending one concrete pourback with a small water seepage that is being closely monitored and appears to be drying out. Received DOE and Ecology concurrence on July 25, 2012 that all punchlist items from SSE final walkdown are complete. SSE doors have been welded shut.

107-N Basin Recirculating/Cooling Facility: Demolition 70% complete. Load out 60% complete.

1900-N Water Supply Tanks – Demolition and loadout 100% complete.

1120-N Storage and Training Building – Demolition of metal building 100% complete. Currently demolishing and loading out concrete foundation. Loadout approximately 50% complete.

100-N Mobile Offices – Demolition and load out of MO-415, MO-100, MO-425, MO-426 and MO-427 complete.

100-N Miscellaneous Items – Currently removing and disposing of miscellaneous materials and equipment around the site.

100-D

183-D Water Treatment Plant - Working with DOE and EPA to tour the facility and address asbestos containing material (ACM) in areas that may be unsafe to enter because of significant building structural failures. Preliminary inspections indicate much of the building's insulation has previously been removed however, some areas of the facility may still contain minor amounts of ACM.

Other Activities

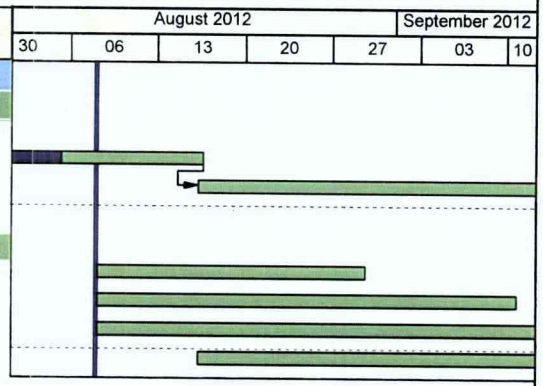
100 Area D4 personnel are making arrangements to move operations from 100-N to 100-D.prior to end of this month.

Attachment 10

FY10-11 CPP 100-N AREA CURRENT - logic reline/FR-444 Rev

07-Aug-12 06:19

Activity ID	Activity Name	Remaining Duration	Physical % Complete	Start	Finish
Procurement					
Procurement					
CULTREV70	RFP	0	100%	27-Jun-12 A	24-Jul-12 A
CULTREV80	WCH Review/Award	6	50%	25-Jul-12 A	16-Aug-12
CULTREV130	Mobilization	24	0%	16-Aug-12	27-Sep-12
CULTREV140	NTP - Excavation/Loadout	0	0%	01-Oct-12	
Submittals					
CULTREV100	PSR - Design	13	0%	08-Aug-12*	29-Aug-12
CULTREV110	PSR - Mobilization	18	0%	08-Aug-12*	10-Sep-12
CULTREV120	PSR - Excavation/Loadout	30	0%	08-Aug-12*	01-Oct-12
CULTREV90	Submittals/Approve	24	0%	16-Aug-12*	27-Sep-12



SPIF Bar Current Bar Labels ◆ ◆

Attachment 11

166938

^WCH Document Control

From: Saueressig, Daniel G
Sent: Thursday, August 09, 2012 7:50 AM
To: ^WCH Document Control
Subject: FW: AOC closure

Please provide a chron number. This email documents a regulatory agreement.

Thanks,

Dan Saueressig
FR Environmental Project Lead
Washington Closure Hanford
521-5326

From: Elliott, Wanda (ECY) [mailto:well461@ECY.WA.GOV]
Sent: Thursday, August 09, 2012 7:44 AM
To: Saueressig, Daniel G
Subject: RE: AOC closure

Yes. And the PAH resampling proposal as well.

Wanda Elliott
(509) 372-7904
Environmental Scientist
Nuclear Waste Program
Washington State Department of Ecology

From: Saueressig, Daniel G [mailto:dgsauere@wch-rcc.com]
Sent: Thursday, August 09, 2012 7:32 AM
To: Elliott, Wanda (ECY)
Subject: RE: AOC closure

Thanks Wanda, does that mean you don't have any issues with us expanding the AOC slightly to the south and also utilizing the D4 AOC for future waste staging?

Thanks,

Dan Saueressig
FR Environmental Project Lead
Washington Closure Hanford
521-5326

From: Elliott, Wanda (ECY) [mailto:well461@ECY.WA.GOV]
Sent: Thursday, August 09, 2012 7:31 AM
To: Saueressig, Daniel G

Cc: Boyd, Alicia; Chance, Joanne C; Landon, Roger J; Wilkinson, Stephen G; Buckmaster, Mark A
Subject: RE: AOC closure

I have no issues with the proposed actions.

Wanda Elliott
(509) 372-7904
Environmental Scientist
Nuclear Waste Program
Washington State Department of Ecology

From: Saueressig, Daniel G [mailto:dgsauere@wch-rcc.com]
Sent: Thursday, August 09, 2012 7:16 AM
To: Elliott, Wanda (ECY)
Cc: Boyd, Alicia (ECY); Chance, Joanne C; Landon, Roger J; Wilkinson, Stephen G; Buckmaster, Mark A
Subject: RE: AOC closure

Wanda, if FR were to utilize portions of the D4 AOC (or expand it to include the the overburden pile to the south) to store waste, these areas would be closed exactly how we (FR) close them now. A Verification Work instruction for the waste site would be prepared and would include any areas that were used to stage waste and samples would be taken to demonstrate the areas were adequately cleaned up. For the overburden piles south of the D4 AOC that had some minor PAH exceedances, FR would like to attempt to surgically remove the material that caused the exceedance and resample these areas so that the material could be used for backfill. Once again, these areas would be included in a verification work instruction and sampling of the surface of the piles would be conducted to verify the material is clean and could be used for backfill.

Give me a call if you have any questions.

Thanks,

Dan Saueressig
FR Environmental Project Lead
Washington Closure Hanford
521-5326

From: Elliott, Wanda (ECY) [mailto:well461@ECY.WA.GOV]
Sent: Wednesday, August 08, 2012 2:24 PM
To: Saueressig, Daniel G
Cc: Boyd, Alicia
Subject: AOC closure

Dan,
Alicia and I were talking over the D4/FR AOC combining proposal. One issue we have is that sometimes D4 closes out their AOCs using just visual and GPERS which won't work for FR AOC closure. What exactly is the proposal for AOC changes?

Wanda Elliott
(509) 372-7904
Environmental Scientist
Nuclear Waste Program
Washington State Department of Ecology

Attachment 12

166937

^WCH Document Control

From: Saueressig, Daniel G
Sent: Thursday, August 09, 2012 9:37 AM
To: ^WCH Document Control
Subject: FW: 100-N Phase II In-situ outline and meeting minutes of June 26 Facilitated Workshop -- for Potential Entry into UMM Minutes on July 12, 2012
Attachments: Bio-remediation wkshp 62812__comments on meeting minutes (2).docx; Outline of In-Situ Petroleum Documents Incorporating June 26 2012 Facilitated Workshop Agreeements.docx

Please provide a chron number (and include the attachments). This email documents a regulatory agreement.

Thanks,

Dan Saueressig
FR Environmental Project Lead
Washington Closure Hanford
521-5326

From: Menard, Nina (ECY) [mailto:nmen461@ECY.WA.GOV]
Sent: Thursday, August 09, 2012 9:20 AM
To: 'Chance, Joanne C'; Boyd, Alicia
Cc: Neath, John P; Feist, Ella T; Saueressig, Daniel G
Subject: RE: 100-N Phase II In-situ outline and meeting minutes of June 26 Facilitated Workshop -- for Potential Entry into UMM Minutes on July 12, 2012

Joanne,

Ecology concurs with 100-N Phase II In-Situ Bioremediation O&M Manual and Test/Performance4 Monitoring Plan Outline and Facilitated Workshop Minutes. We also agree to the submittal into the August UMM Minutes today.

Thank you for your patience,

Nina M. Menard
Environmental Restoration
WA Dept. of Ecology
509-372-7941 Office
509-420-6839 Cell

From: Chance, Joanne C [mailto:joanne.chance@rl.gov]
Sent: Tuesday, July 10, 2012 4:08 PM
To: Menard, Nina (ECY); Boyd, Alicia (ECY)
Cc: Neath, John P; Feist, Ella T; Saueressig, Daniel G

Subject: FW: 100-N Phase II In-situ outline and meeting minutes of June 26 Facilitated Workshop -- for Potential Entry into UMM Minutes on July 12, 2012

Hi Nina and Alicia,

Below please find the revised 100-N Phase II In-Situ Bioremediation O&M Manual and Test/Performance Monitoring Plan Outline and Facilitated Workshop Minutes for your review, concurrence; and our mutual submittal into UMM Minutes. We believe we have incorporated the agreements reached at the workshop. Please advise us of any discrepancies, concerns, or questions you may have. If your time allows for completion of your review, we would like to enter these documents into this Thursday's UMM Minutes. Thanks for your assistance.

Joanne C. Chance
U.S. Department of Energy
Office of Assistant Manager for the River Corridor
825 Jadwin Ave / MSIN A3-04
Richland, WA 99352
(509) 376-0811

FLIP CHARTS FROM WORKSHOP ON THE 100-N PHASE II IN SITU BIOREMEDIATION OPERATION AND MAINTENANCE MANUAL AND TEST/PERFORMANCE MONITORING PLAN OUTLINE

Hanford Training Center
June 26, 2012

Attendees: Joanne Chance, DOE-RL
Mark French, DOE-RL
John Neath, DOE-RL
Mike Thompson, DOE-RL
Alicia Boyd, Ecology
Nina Menard, Ecology
Ella Feist, WCH
Dan Saueressig, WCH
Wendy Thompson, WCH
Todd Martin, Facilitator

Meeting Goal: Agreement on the In Situ Bioremediation Operation and Maintenance Manual and Test/Performance Monitoring Plan outlines.

Topic to be Discussed at a Later Meeting: TPA Milestone text unclear on bioremediation. Ecology and DOE should discuss how regulatory requirements will be met (e.g., RAGs, groundwater). After an agreement on this clarification is reached, it will need to be documented (possibly in a change notice). The ultimate clarity will be found in the final ROD.

OUTLINE DISCUSSION

Purpose Statement

- The group agreed to the purpose statement.
- The plan will need text on biosparging even though it is okay to delete the text on biosparging from the purpose statement.
- The plan should include clear definitions of bioremediation, bioventing, and biosparging.

Operations and Maintenance (O&M) Manual Criteria

- Ecology will double check the O&M references they provided to determine if this document is an O &M manual or plan.
- Intent of the plan's O&M section is to ensure the system is being maintained correctly.
- The group agreed to this section.

Test/Performance Monitoring Plan Criteria

- Separate meetings will be held to discuss additional groundwater monitoring parameters since groundwater monitoring is under the purview of the Groundwater Project. A placeholder will be included in the plan where details from these discussions can be incorporated.
- The microbial testing will be conducted as soon as possible. If the testing confirms petroleum degraders are present, a borehole will not be considered until respiration rates drop based on criteria in the plan (e.g., range of values, specific value, diminishing returns trending) to trigger additional discussions between Ecology and DOE. If no petroleum degraders are present, additional discussions will be held between DOE and Ecology on borehole/nutrient additions.
- The microbial testing flow chart handed out at the workshop will be included in the plan, with the addition of the decision point of discussion alternatives should the microbial testing fail.
- Ecology would like wells outside the groundwater plume to be considered when collecting data because they believe there is some uncertainty about the extent of the vadose zone contamination. A 3D type graphic of boreholes and concentrations will be included in the plan to allow better visualization of the contamination.
- Anecdotal information (petroleum smell) should be used to inform the plan.
- The group agreed to this section.

System Shutdown and Confirmation of Cleanup

- The group agreed to this section.

Additional Items and Next Steps

- Need to know what requirements comparing cleanup data to so we ensure the right data is collected. Agreement needs to be developed on what "no backsliding" means (e.g., if values rise compared to interim numbers, but are still compliant with 2007 MTCA, is that okay?)

- Ecology to determine if comments in RCR are closed based on June 23 DOE letter.

- Dan to send rewrite of plan outline to RL for concurrence by Ecology.

- From page 1, DOE and Ecology to clarify TPA milestone completions regarding bioremediation for TPA Milestones M-16-55 (12/31/12), M-16-00A (12/31/12), and M-16-00 (9/30/24).

100-N PHASE II IN-SITU BIOREMEDIATION PROJECT'S OPERATION AND MAINTENANCE MANUAL AND TEST/PERFORMANCE MONITORING PLAN OUTLINE

Purpose

The following outline proposes the major criteria and topics to be included in the Operations and Maintenance (O&M) Manual and Test/Performance Monitoring Plan (T/PMP) for the Phase II In-Situ Bioremediation Project at the UPR 100-N-17 Deep Vadose Zone Contaminated Waste Site. The outline incorporates the agreements reached at the DOE-RL, Ecology, and WCH Facilitated Workshop held on June 26, 2012.

The T/PMP's objective will include determining the rate of bioremediation occurring to remediate UPR-100-N-17 deep vadose zone contamination to meet Tri-Party Agreement Milestone M-16-00. The T/PMP will use EPA definitions of bioventing in situ technology that uses indigenous microorganisms to biodegrade organic constituents adsorbed to soils in the unsaturated zone.

Upon Ecology concurrence, RL and WCH will initiate preparation of the two documents according to the indicated schedule.

I. Operations and Maintenance Manual (O&M) Criteria

- System description (includes discussion of equipment, personnel qualifications and responsibilities, operation of the system, emergency contact information, and includes as-built drawings)
  - Blower unit
  - Monitoring gauges
  - Flow control equipment
- System maintenance/inspections (includes discussion of equipment maintenance, replacement parts, maintenance and inspection schedule, maintenance and inspection logs and records)
  - Blowers/motors
  - Air filters
  - Maintenance schedule
  - Repairs
  - Well maintenance

- System monitoring (includes discussion of shutdown contingency and abnormal occurrences)

  - Blower performance monitoring
  - Monitoring schedule
  - Reporting monitoring results

- Data collection (includes discussion of collection requirements and record keeping)

  - Pressure
  - Temperature
  - Power usage
  - Flow measurement
  - Carbon dioxide and oxygen measurements.

Per the draft comment response package, DOE and WCH will provide the O&M Manual to Ecology within 6 months of initiating operation of the system. Installation, testing, and initial system operation is required prior to preparing the O&M Manual.

II. Test/Performance Monitoring Plan Criteria

Include in definitions section bioremediation, bioventing, and biosparging. Also, a detailed graphic of existing data will be included in the plan and the archive sample testing decision flowchart (attached) will be included in the plan. The flowchart will include a decision point for alternatives discussion with Ecology should the microbial testing fail.

- Existing baseline data (from bioventing well data and pilot tests)

  - Bioventing well data (WCH-370)
    - Vadose soil petroleum concentrations
    - Measured physical soil properties (moisture, pH)
    - Estimated physical soil properties (grain size, bulk density)
    - Total organic carbon concentration
    - VOAs concentrations, SVOAs concentrations
    - Depth to groundwater
    - Nutrients (TKN, phosphorous, nitrate/nitrite nitrogen, ammonia-nitrogen)
    - Metal concentrations
    - Strontium-90 activity
    - Estimate from heterotrophic bacterial plate count

  - Pilot test data (WCH-490)
    - Radius of influence tests
    - Respirometry tests

  - Remedial Investigation/Feasibility Study
    - 199-N-183 borehole information

- TPA data from vadose zone samples will be assembled in a 3-D Type graphic

- Groundwater monitoring data (HEIS and annual groundwater reports)

- Include a general discussion on biosparging
  - Groundwater petroleum concentrations
  - Aquifer tube petroleum concentrations
  - Groundwater elevations

- Additional test data collection

  - Microbial testing of archived soil samples (from existing bioventing wells if feasible). If microbial speciation of the archived soil samples is successful in documenting the existence of petroleum degraders, then no further discussions on alternatives data collection (e.g., borehole) will be required (based on decision flowchart).
    - Heterotrophic bacterial count
    - Speciation of microbial populations
    - Hydrocarbon degraders
    - Estimation of biodegradation rate
    - Estimate potential benefit of nutrient addition

- Operations and maintenance data collection

  - Respirometry tests (oxygen and carbon dioxide concentrations)
    - Baseline
    - Operational

  - Refine/verify radius of influence tests

- Groundwater monitoring (CHPRC) – To be used to evaluate vadose zone bioremediation progress. A placeholder will be included in the plan to capture the agreed to groundwater monitoring between RL groundwater projects and Ecology.

  - TPH concentrations
  - Groundwater elevation

- Optional borehole – A borehole will be considered under the following conditions:

  - If respiration rate declines significantly during operation; data will be collected to adjust design (e.g., evaluate nutrient addition, oxygen level adjustment, potential new air injection location, etc.), or assess if remediation is nearing completion; and to recalculate projected completion.

  - Borehole data collection
    - Vadose soil petroleum concentrations (gasoline range, diesel range, motor oil range, extractable petroleum hydrocarbons)

- Physical soil properties (grain size, bulk density, moisture, pH)
- Total organic carbon concentration
- Depth to groundwater
- Nutrient concentrations (TKN, phosphorous, nitrate/nitrite nitrogen, ammonia-nitrogen)
- Metal concentrations
- Polycyclic aromatic hydrocarbons concentrations
- Strontium-90 activity, gamma radionuclide activity
- Microbial testing
  - Heterotrophic bacterial count (colonies)
  - Speciation of microbial population
  - Hydrocarbon degraders (species)
  - Estimation of biodegradation rate (if feasible)
  - Nutrient optimization evaluation

- System shutdown and confirmation of cleanup

  - Attainment of agreed-upon conditions under which bioventing system may cease
    - Bioventing respiration measurements performed within the area being remediated indicate declining degradability relative to a background control (i.e., majority of biodegradable constituents have been consumed)
    - Soil sample analysis (borehole) indicate contaminants in the remediated area are at levels below regulatory requirements or if not, will consider operational costs and operational time frames for variance/alternatives
    - Evaluate system limitations – is change needed to improve progress toward closure or can system be closed
    - Evaluate groundwater protection - estimate of residual contaminant mass in vadose indicates no further leaching to groundwater; and/or an evaluation of nature and extent of remaining groundwater petroleum residual contamination indicates remediation is complete.

The draft T/PMP will be prepared and provided to Ecology for review during September 2012, with finalization of the plan estimated to occur during the October/November timeframe.

Attachment 13

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

Determination Number
SDF-100N-020

A. INSTRUCTIONS

This form must be completed to: 1) document existing data in order to determine if current data is suitable to prove completion of 100-N Ancillary Facilities, or 2) document that site-specific sampling and analyses are needed to provide completion for 100-N Ancillary Facilities.

B. GENERAL INFORMATION

Building Name: Water Supply Tanks

Building Number: 1900-N (100-N-105)

WIDS Sites Associated or Adjacent:
- 100-N-7 (Not Accepted)
- 100-N-61:4 (Accepted)
- 100-N-84:1, 3, 4, 7 (Accepted, colon 7 was reclassified as No Action)
- 100-N-105 (Discovery)

Other:
The 1900-N facility consisted of a concrete silo, four above-grade steel tanks, and associated pipelines (BHI-00221 pg. 3-113 & SIS Facility Summary Report for 1900-N). The four tanks consisted of the After Heat Removal Water Storage Tank, the Demineralized Water Storage Tank, the Filtered Water Storage Tank, and the Emergency Raw Water Storage Tank (BHI-00221 pg. 3-113 & SIS Facility Summary Report for 1900-N). The 1900-N facililty received water from, and supplied water to, the 105-N Reactor and various reactor process systems (BHI-00221 pg. 3-113 & SIS Facility Summary Report for 1900-N).

Demolition of the above grade portions of the 1900-N facility occurred from April to August of 2005 (EL-1589 pgs. 5-98). The silo, four tanks, and associated above-grade piping were removed and the footprint was backfilled with approximately 18 inches of clean soil (CCN 123355 pgs. 1 & 2). Demolition debris were disposed of at the Environmental Restoration Disposal Facility (ERDF) (CCN 123355 pg. 2).

A second demolition effort was performed at the 1900-N facility in May-July of 2012 to remove the concrete tank foundations, below-grade piping, and contaminated soils (oil stained sands) that were previously left in place. The foundations were entirely removed and portions of the below-grade piping and adjacent contaminated soils within the layback of the excavation were removed. The Field Remediation (FR) organization will remove all residual portions of the below-grade piping that weren't removed by the D4 organization.

C. INFORMATION SOURCES

Available information (list document number for each if applicable):

Historical Site Assessment: N/A

Site Walkdown: Visual Inspection of 1900-N excavation soils: CCN 166744

IH Characterization Report: N/A

Radiological Survey: Global Positioning Environmental Radiological Surveyor (GPERS) Surveys: ESR-FRM-05-0188C ESRFRM120113C

IHC/FHC Document:
- 100-N Ancillary Facilities Preliminary Hazard Classification: CCN 095435
- Initial Hazard Categorization (IHC) Documentation Form for 1900-N: IHC-2005-0005

WIDS/SIS:
- RCC Stewardship Information System (SIS) Facility Summary Report for 1900-N
- Waste Information Data System (WIDS) General Summary Report for 100-N-105

PDSR: N/A

Facility Inspection: Facility Inspection Summary for 1900-N Water Supply Tanks: CCN 116918

Waste Characterization Checklist: N/A

Summary Report: Status of the 1900-N Tanks at Completion of D & D Activities: CCN 123355

Other:
- Environmental Restoration Disposal Facility Waste Profile Datasheet for 1900-N, Rev. 2: WP-1900N001
- ERC Surveillance Report on Asbestos Spill Clean Up at 1900-N: SH-2005-S-014

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- Logbook for 1900-N Demolition: EL-1589
- "Pre-Existing" Conditions Survey of Hanford Site Facilities Phase II, Rev. 0: BHI-00221
- Radiological Survey Records: RSR-100SMT-04-0291 & RSR-107N-05-0353
- Photographs of the 1900-N Facility Pre-Demolition, No Time Stamp: SIS Facility Summary Report for 1900-N pgs. 4-11
- Photographs of the 1900-N Facility Demolition, Time-Stamped: SIS Facility Summary Report for 1900-N pgs. 12 & 13 (4/28/2005)
- Photograph of the 1900-N Facility Post-Demolition, No Time Stamp: SIS Facility Summary Report for 1900-N pg. 14
- Photograph of the 1900-N Facility Post-Demolition, Time Stamped: CCN 166744, pgs. 2,3,5, and 6 (7/12/2012)

D. HAZARDOUS SUBSTANCES

Check all that apply:

☐ None ☒ Asbestos containing material ☒ Lead ☐ PCBs/PCB Articles ☒ Oils/Greases

☒ Chemicals List: Silver Lead based paint on exterior of the Filtered Water Storage Tank (CCN 116918 pg. 5)

☒ Radiological Contamination ☐ Mercury/Mercury Devices

☒ Other: Coal tar paint inside the Filtered Water Storage Tank (CCN 116918 pg. 4)

References/Comments:
- Asbestos containing material: Asbestos was present on tank exteriors and associated piping and possibly gasket material (IHC-2005-0005 pg. 2, SH-2005-S-014 pg. 1, and CCN 116918 pg. 5). At least some of this asbestos was friable (BHI-00221 pg. 3-113).
- Lead: Lead paint was present on tank exteriors (CCN 116918 pgs. 4 & 5). At least one of the tanks yielded an elevated lead concentration (WIDS General Summary Report for 100-N-105).
- Oils/Greases: Soil beneath the facility tanks was stained with oil (WIDS General Summary Report for 100-N-105 & CCN 116918 pg. 6). The stained soil was determined to be oil impregnated sand utilized to inhibit corrosion of the bottom surfaces of the tanks.
- Radiological Contamination: Facility piping was potentially radiologically contaminated when contaminated water was transferred to the facility tanks (CCN 095435 Table A-1 pg. 8). The tanks were labeled "Potentially Internally Contaminated" (IHC-2005-0005 pg. 2 & CCN 116918 pg. 5). There was a potential for low levels of radiological contamination to be present in the After Heat Removal Tank because it received secondary reactor cooling water (CCN 116918 pg. 5).

Liquids: ☒ Yes ☐ No

If yes, describe source and nature of liquids:
This facility contained four water storage tanks and associated piping (BHI-00221 pg. 3-113 & SIS Facility Summary Report for 1900-N). The piping transported water between the tanks and the 105-N Reactor and various reactor process systems (BHI-00221 pg. 3-113 & SIS Facility Summary Report for 1900-N). The water at the facility was potentially radiologically contaminated (CCN 095435 Table A-1 pg. 8, IHC-2005-0005 pg. 2, and CCN 116918 pg. 5).

Were the hazardous substances removed from the facility prior to demolition? ☐ Yes ☒ No

As verified by what documentation:
Asbestos was removed from the exteriors of the tanks and above-grade piping prior to demolition (IHC-2005-0005 pg. 2, SH-2005-S-014 pg. 1). A piece of asbestos, measuring approximately 324 sq. in., was discovered during demolition and was cleaned up as a spill (SH-2005-S-014 pg. 1).

Was there potential for hazardous substances to be introduced into the soils during facility operations or demolition? ☒ Yes ☐ No ☐ N/A

References/Comments:
Paint flakes were knocked off of facility tanks during demolition (WIDS General Summary Report for 100-N-105). The tank exteriors had been painted with lead paint and at least one of the tanks had an elevated lead concentration (CCN 116918 pgs. 4-5 & WIDS General Summary Report for 100-N-105).

List any hazardous materials left in the building for demolition:
- Silver paint on exterior of the Filtered Water Storage Tank
- Coal tar paint inside the Filtered Water Storage Tank
- Lead paint present on tank exteriors
- Oil-stained soil beneath the facility tanks
- Potentially radiologically contaminated piping and tanks

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Does review of historical records and process knowledge indicate a potential for radiological or chemical contamination to be present in the facility?
Historical knowledge of processes associated with this facility support the conclusion that the facility was not chemically or radiologically contaminated. However, demolition of the above grade tank structures and components in 2005 appeared to have contributed to the creation of a waste site in the form of potentially high lead concentration paint flakes being present in the facility footprint soils following demolition. The soils, and presumably the soil contaminated with paint chips, have since been removed with the remainder of the below grade of the facility.

Chemical:
Paint flakes created during demolition of the tanks would likely have been removed with the residual contaminated soil of WIDS site 100-N-105. The oil-impregnated sands present beneath the tanks was located within the facility foundations, which were removed during below grade demolition.

Radiological:
One radiological survey performed at the 1900-N facility did not detect contamination, while another radiological survey identified contamination on the exterior of the Demineralized Water Storage Tank (RSR-107N-05-0353 & RSR-100SMT-04-0291). The GPERS survey of the 1900-N facility footprint, following demolition of the above grade tanks did not detect radiological contamination
(ESR-FRM-05-0188C & RSR-107N-05-0353). Accordingly, any radiological contamination present in the facility tanks or piping would have been removed during demolition.
The GPERS survey of the excavation following removal of the tank foundation rings and oil impregnated sands did not detect radiological contamination (ESRFRM120113C).

Comments:
Based on sample analysis, it was determined that removal of the oiled sands within the tank foundations was not necessary during above grade demolition of the tanks in 2005 (CCN 123355 pg. 1).

Based on sample analysis, water from piping associated with the 1900-N facility was approved for use as dust suppression (CCN 123355 pg. 1).

Pertinent design drawings include H-1-30541 Rev. 5, H-1-30542 Rev. 6, H-1-37147, H-1-37148, and H-1-45007 Sheets 9, 10, 16, and 17.

E; FIELD OBSERVATIONS

Visual Inspection

Were any stained soils/anomalies discovered during or after demolition of the facility? ☐ Yes ☒ No

References/Comments:
See visual inspection CCN 166744 (attached).

Were samples taken of the stained soils/anomalies? ☐ Yes ☐ No ☒ N/A

References/Comments:

Do results of the samples indicate that chemical contamination exists? ☐ Yes ☐ No ☒ N/A

References/Comments:

Is the area potentially a discovery site? ☐ Yes ☒ No

References/Comments:

Radiological Surveys

Did radiological surveys (GPERS or equivalent) identify contamination? ☒ Yes ☐ No

References/Comments:
One radiological survey record documented the presence of radiological contamination on the exterior of the Demineralized Water Storage Tank (RSR-100SMT-04-0291). No other reviewed radiological survey identified contamination. Radiological contamination was not detected during the GPERS survey of the facility footprint following

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

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removal of the above grade tanks (ESR-FRM-05-0188C). Additionally, the GPERS survey performed following removal of the tank foundation rings and oil impregnated sands did not identify contamination (ESRFRM120113C).

Were samples taken of the radiologically contaminated soils? ☐ Yes ☐ No ☒ N/A

References/Comments:
This question is not applicable because the identified radiological contamination was not present in facility soils, but on the Demineralized Water Storage Tank (RSR-100SMT-04-0291).

Is the area potentially a discovery site? ☐ Yes ☒ No

References/Comments:
The GPERS survey of the facility footprint, or of the excavation following removal of the oil impregnated sands did not detect radiological contamination (ESR-FRM-05-0188C and ESRFRM120113C).

Were the contaminated materials removed? ☒ Yes ☐ No ☐ N/A

References/Comments:
The Demineralized Water Storage Tank was removed during demolition and disposed at the ERDF (CCN 123355 pgs. 1 & 2). The tank foundation was subsequently demolished and removed in 2012.

F. WIDS SITES

Were there any WIDS sites affected by D4 activities? ☒ Yes ☐ No

If yes, list the WIDS sites:
124-N-2: This site was a septic tank. Movement of heavy equipment during 1900-N demolition caused a partial collapse of 124-N-2 (EL-1589 pg. 87 & SIS Facility Summary Report for 1900-N pgs. 1 & 2). The septic tank portion of the system was removed by D4 in 2005, the cesspool section of the system was removed by D4 in 2012 in conjunction with demolition of the 182-N Building.

100-N-61:4 and 100-N-84:1, 3, 4, 7: These sites consist of pipelines existing underneath and adjacent the 1900-N tanks. The portion of these pipelines that fell within the excavation layback boundary were removed during D4 activities at the 1900-N facility.

100-N-105 (discovery site): This site consists of the soil presumably contaminated with lead paint chips from demolition of the 1900-N Tanks. This site is within the footprint of the 1900-N facility footprint.
This soil has presumably been removed during D4 activities at the 1900-N facility.

Were the WIDS site(s) completely removed? ☐ Yes ☒ No

References/Comments:
124-N-2: The collapsed portion of 124-N-2 was filled with rock and soil (EL-1589 pg. 87 & SIS Facility Summary Report for 1900-N pgs. 1 & 2). It was not removed during D4 activities at the 1900-N facility, however, the site was removed by D4 at a later date.

100-N-61:4 and 100-N-84:1, 3, 4, 7: The FR organization is responsible to close out this WIDS site.

100-N-105: The FR organization will remove any portion of this WIDS site remaining after D4 activities are completed at the 1900-N facility.

Will the Ancillary Facility Footprint be deferred to FR to be closed out with a co-located Waste Site? ☐ Yes ☒ No

References/Comments:
The FR organization is responsible to close out WIDS sites 100-N-61:4, 100-N-84:1, 3, 4, 7, and 100-N-105. As such, any portion of 100-N-61:4 that has not been removed by the D4 organization will be removed and verification sampled (if required) by the FR organization. Deferral will not be necessary since the 100-N-105 WIDS site, which was associated with and encompassed the entire footprint of the 1900-N Tanks, is already identified for remediation and verification sampling.

G. COPCs FOR SOILS AND STRUCTURES REMAINING AFTER DEMOLITION

What are the potential contaminants of concern for the remaining below-grade soil?

☒ None ☐ SVOC ☐ VOC ☐ Metals ☐ TPH ☐ Rad ☐ PCBs

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

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☐ Other (Specify): _____

Comments:

Summary of in-process soil sampling requirements:
N/A

Constituents detected / concentrations / rationale
Consult Sample Collection Summary below

Sample Collection Summary
- Oiled sand at 1900-N: Sample (HEIS) Number J036N8 (CCN 123355 pg. 1)
- Water at 1900-N: Sample (HEIS) Numbers J030N8 and J03748 (CCN 123355 pg. 1)
- Paint at 1900-N: Sample (HEIS) Numbers J103C8, J103C9, and J03379
- Demolition Debris from 1900-N: Sample (HEIS) Number J030D2 (WP-1900N001 pg. 1)

H. NOTES / ADDITIONAL INFORMATION

☒ Check here if additional information / data / maps / sketches are attached to this form.

If checked, list the attachment(s):
Visual Inspection of 1900-N excavation soils on 7/12/2012: CCN 166744

I. SAMPLING

Are soil samples required to demonstrate that remaining structure or below-grade soils meet cleanup standards? ☐ Yes ☒ No

Based on the above information it was determined that sampling: ☐ will ☒ will not be required in order to demonstrate that cleanup criteria have been met.

The individual below acknowledges that the review of this facility has been completed. He or she also commits to provide to the Department of Energy (DOE) and the Washington State Department of Ecology (Ecology) any available information that could alter the sampling decision established in this form.

Information Reviewer Signature	Printed Name	Date
David Warren	David Warren	8.6.12

The regulatory representative below agrees with the decision outlined in section I of this form for the indicated facility and supports implementation of that decision based on the information currently available.

DOE Signature	Printed Name RF Guercia	Date 8/6/2012
Ecology Signature Nina M. Menard	Printed Name NINA M. MENARD	Date 8/9/2012

166744

^WCH Document Control

From: Warren, David J
Sent: Thursday, July 19, 2012 10:43 AM
To: ^WCH Document Control
Subject: FW: Visual inspection of the 1900-N excavation soils

Attachments: 1900-N Visual Inspection.doc; ESRFRM120113C.pdf

Please CHRON this e-mail and attachments as the subject line and provide me with the CCN number. Contact me if you have any questions. Thanks.

Dave Warren
539-6040

From: Warren, David J
Sent: Thursday, July 19, 2012 10:40 AM
To: Allen, Mark E
Cc: McCurley, Clay D
Subject: Visual Inspection of the 1900-N excavation soils

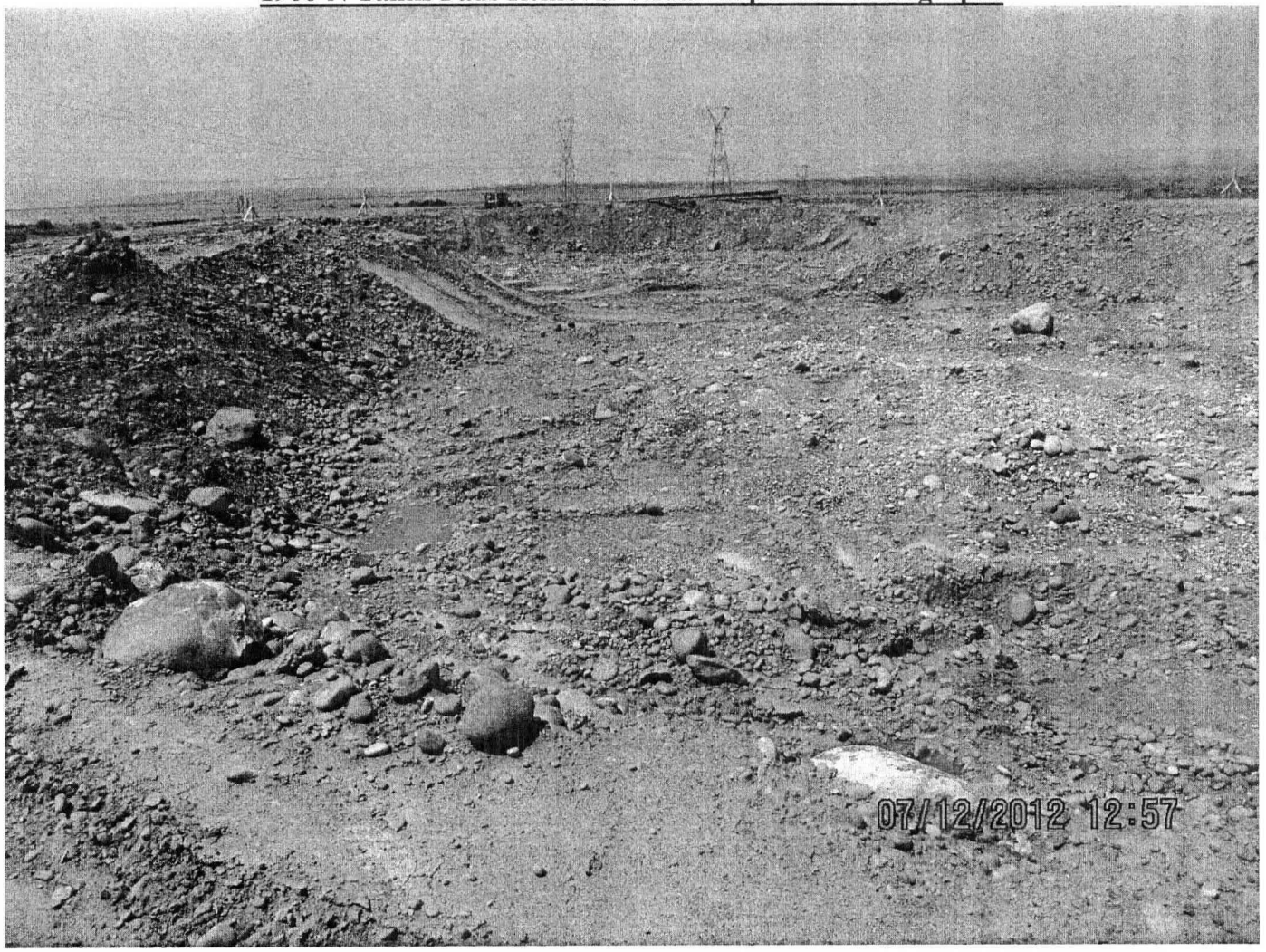
At approximately 1300 hours on 7/12/12, the soils of the excavation(s) for removal of the 1900-N Tank pads were visually inspected for signs of staining or anomalous items. The excavations were observed to be free of any stained soils or anomalies that would be indicative of chemical or petroleum contamination. The GPERS survey (Performed 7/17/2012) didn't identify contamination, nor was any expected since the structures were not radiologically contaminated. Please see the attached word file for photographs that were taken during the inspection and PDF file of the GPERS survey. I'll CHRON this e-mail and attachments for future use as reference for closure documentation. Feel free to contact me if you have any questions. Thanks.

David Warren
100-N D4 Environmental Project Lead
WCH
539-6040

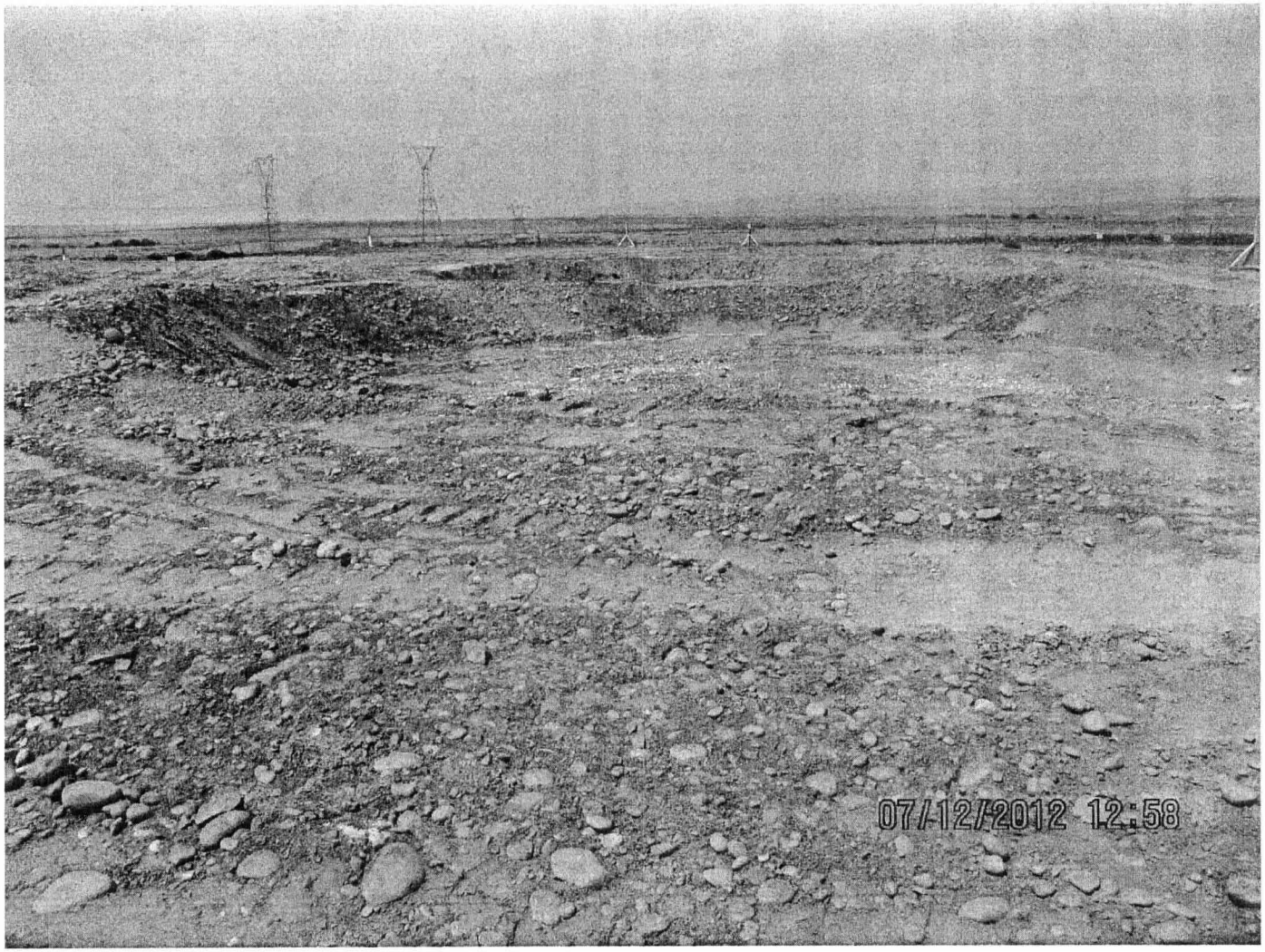
1900-N Visual Inspection.doc ...

ESRFRM120113C.pdf (927 KB)

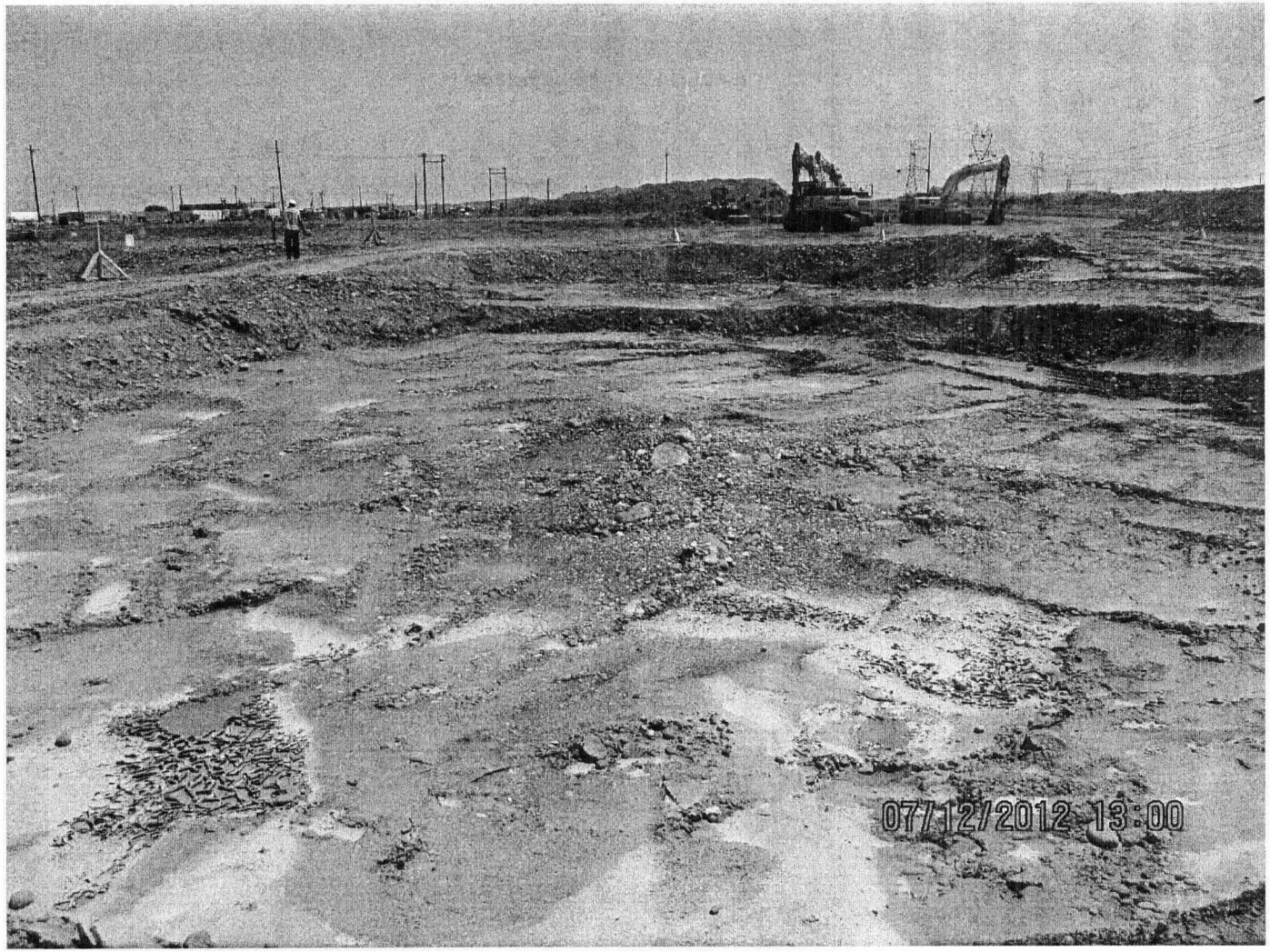
1900-N Tanks Pads Removal Visual Inspection Photographs



1900-N Excavation Looking West (view from Southeast tank ring excavation to Southwest excavation)



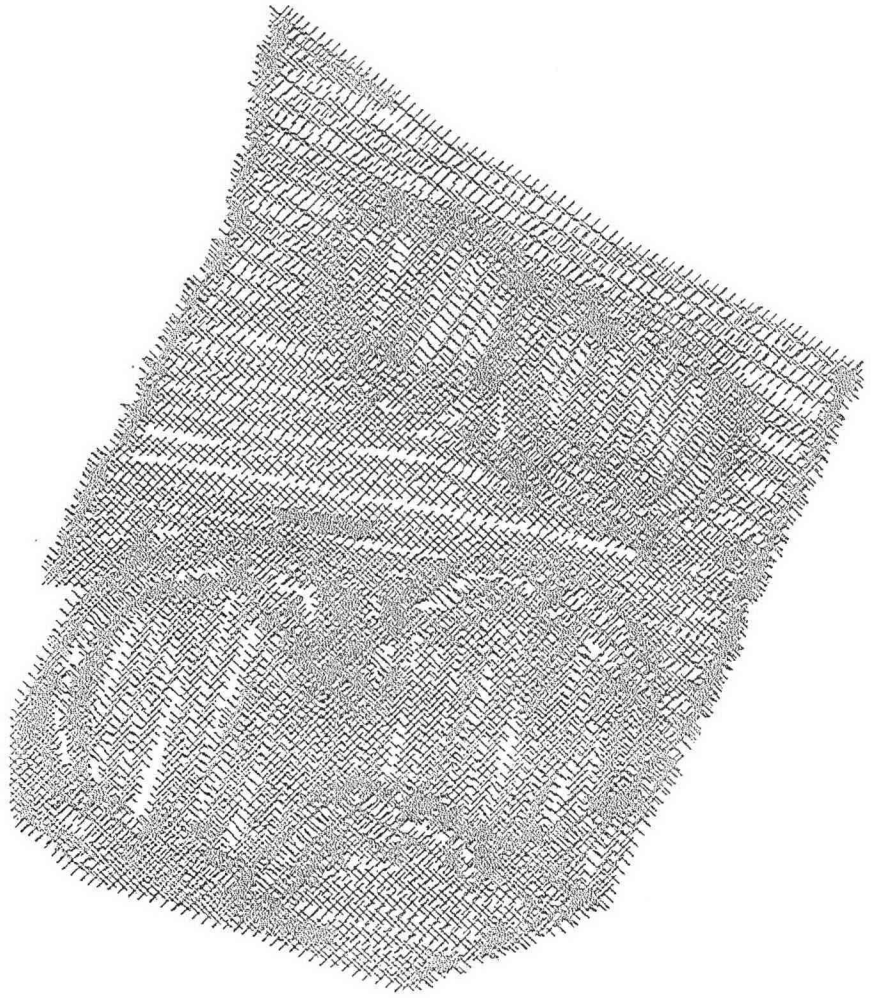
1900-N Excavation Looking West (view from Northeast tank ring excavation to Northwest excavation)

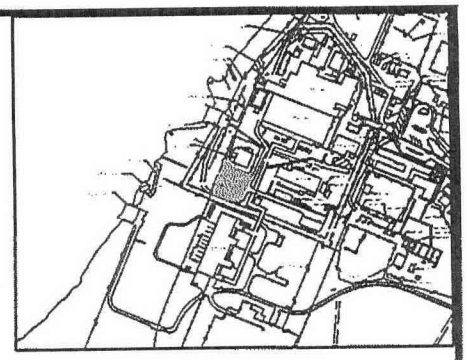


1900-N Excavation Looking East (view from Northwest tank ring excavation to Northeast excavation)

1900-N Excavation Looking South-Southwest (view from Southwest tank ring excavation)

N





Site View

Bkg Location
635 meters E →
1144 cpm

Copy

Legend

NET CPM

- × <1716
- ● 1716 - 5000
- ● 5000 - 10000
- ● 10000 - 25000
- ● 25000

Summary Statistics

Coverage File: N199
Number of Data Pnts: 4633
Type of Survey: gamma
Max GCPM: 1806
Avg Bkg CPM: 1144
Survey Date: 7/17/2012
Area Surveyed: 3,834 m^2
Project File: ESRFRM120113
Pdf File: ESRFRM120113C

100N D4
1900-N
GPERS Radiological Survey
Gamma Track Map

0 5 10 15 20 25
Meters

Environmental Excellence
HANFORD

EBERLINE SERVICES
HANFORD, INC.

Survey Map Prepared By Bruce Coomer, ESI

Attachment 14

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

Determination Number
SDF-100N-026

A. INSTRUCTIONS

This form must be completed to: 1) document existing data in order to determine if current data is suitable to prove completion of 100-N Ancillary Facilities, or 2) document that site-specific sampling and analyses are needed to provide completion for 100-N Ancillary Facilities.

B. GENERAL INFORMATION

Building Name: East Observation Post, Guard Tower Building Number: 1605-NE

WIDS Sites Associated or Adjacent:
100-N-66 (Accepted)

Other:
The 1605-NE facility was a steel-sided enclosure positioned atop the 105-N Reactor roof (CCN 157853 pg. 1, IHC-2005-0032 pg. 1, and WCH-473 pg. 9). It provided a vantage and source of protection for 100-N guard personnel (WCH-473 pg. 1). The 1605-NE facility was demolished in 2010 and demolition debris were disposed at the Environmental Restoration Disposal Facility (ERDF) (CCN 157853 pg. 2 & WCH-473 pgs. 1 & 9).

Given the previous location of the 1605-NE on top of the 105-N Reactor roof, the facility footprint is encompassed by the Interim Safe Storage (ISS) enclosure. Accordingly, its footprint is essentially part of the 100-N-66 WIDS site.

C. INFORMATION SOURCES

Available information (list document number for each if applicable):

Historical Site Assessment: N/A Site Walkdown: N/A

IH Characterization Report: N/A Radiological Survey: N/A

IHC/FHC Document: Initial Hazard Categorization (IHC) Documentation Form for D4 of Buildings 105NB, 1722N and 1605NE: IHC-2005-0032

WIDS/SIS: RCC Stewardship Information System (SIS) Facility Summary Report for 1605-NE

PDSR: Post-Demolition Summary Report for the 1605-NE East Observation Post: CCN 157853

Facility Inspection: N/A

Waste Characterization Checklist: N/A Summary Report: N/A

Other:
- 100 Area D4 Project Building Completion Report, Rev. 0: WCH-473
- Removal Action Work Plan for 105-N/109-N Buildings Interim Safe Storage and Related Facilities, Rev. 1: DOE/RL-2005-43
- Photograph of the 1605-NE Facility Pre-Demolition, Time-Stamped: SIS Facility Summary Report for 1605-NE pg. 3 (2/9/2006)
- Photographs of the 1605-NE Facility Pre-Demolition, No Time Stamp: SIS Facility Summary Report for 1605-NE pg. 2, CCN 157853 pg. 4, and WCH-473 pg. 10
- Photographs of the 1605-NE Facility Post-Demolition, No Time Stamp: SIS Facility Summary Report for 1605-NE pg. 4 & CCN 157853 pg. 5

D. HAZARDOUS SUBSTANCES

Check all that apply:

☒ None ☐ Asbestos containing material ☐ Lead ☐ PCBs/PCB Articles ☐ Oils/Greases

☐ Chemicals List:

☐ Radiological Contamination ☐ Mercury/Mercury Devices

☐ Other:

References/Comments:
No reviewed document confirmed the presence of any hazardous substance at the 1605-NE facility.

Liquids: ☐ Yes ☒ No

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

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If yes, describe source and nature of liquids:
The 1605-NE facility was used exclusively as a vantage and source of protection for 100-N guard personnel (WCH-473 pg. 1). No reviewed document indicated that liquids had been present at the facility.

Were the hazardous substances removed from the facility prior to demolition? ☐ Yes ☐ No

As verified by what documentation:
This question is not applicable as no reviewed document confirmed the presence of any hazardous substance at the 1605-NE facility.

Was there potential for hazardous substances to be introduced into the soils during facility operations or demolition? ☐ Yes ☐ No ☒ N/A

References/Comments:
The 1605-NE facility was located atop the 105-N Reactor roof, approximately 75 feet above grade (CCN 157853 pg. 1, IHC-2005-0032 pg. 1, and WCH-473 pg. 9). A minimum approximate distance of 100 feet separated the 1605-NE facility from the edge of the 105-N Reactor roof, as demonstrated by a pre-demolition survey (CCN 157853 Attachment 1).

List any hazardous materials left in the building for demolition:
N/A

Does review of historical records and process knowledge indicate a potential for radiological or chemical contamination to be present in the facility?
Chemical:
One reviewed document indicated that asbestos-containing material was believed to have been present in the 1605-NE facility (DOE/RL-2005-43 pg. 1-17). However, no reviewed document confirmed the presence of any hazardous substance either in or on the 1605-NE facility.

Radiological:
No reviewed document provided radiological survey information for the 1605-NE facility (CCN 157853 pgs. 1 & 2). The 1605-NE facility was not posted as a radiologically controlled area at the time of initial hazard categorization (IHC-2005-0032 pg. 1).

Comments:
N/A

E. FIELD OBSERVATIONS

Visual Inspection

Were any stained soils/anomalies discovered during or after demolition of the facility? ☐ Yes ☒ No

References/Comments:
As detailed in parts B and D of this form, the 1605-NE facility was not adjacent to any soil. No anomalies were found at the 1605-NE facility (CCN 157853 pg. 2).

Were samples taken of the stained soils/anomalies? ☐ Yes ☐ No ☒ N/A

References/Comments:

Do results of the samples indicate that chemical contamination exists? ☐ Yes ☐ No ☒ N/A

References/Comments:

Is the area potentially a discovery site? ☐ Yes ☒ No

References/Comments:

Radiological Surveys

Did radiological surveys (GPERS or equivalent) identify contamination? ☐ Yes ☒ No

References/Comments:
No reviewed document provided radiological survey information for the 1605-NE facility (CCN 157853 pgs. 1 & 2).

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

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Were samples taken of the radiologically contaminated soils? ☐ Yes ☐ No ☒ N/A

References/Comments:

Is the area potentially a discovery site? ☐ Yes ☒ No

References/Comments:

Were the contaminated materials removed? ☐ Yes ☐ No ☒ N/A

References/Comments:
No reviewed document indicated the potential for presence of radiologically contaminated material at the 1605-NE facility.

F. WIDS SITES

Were there any WIDS sites affected by D4 activities? ☐ Yes ☒ No

If yes, list the WIDS sites:
100-N-66 encompasses the area underneath the 1605-NE facility footprint. The 1605-NE was a completely above grade facility that was attached to the roof of the 105-N Reactor Building. Its' removal did not affect the 100-N-66 waste site. The portion of the reactor building that was underneath the 1605-NE still remains under the roof of what is now the Interim Safe Storage (ISS) Enclosure of the 105-N Reactor Building.

Were the WIDS site(s) completely removed? ☐ Yes ☐ No

References/Comments:
N/A

Will the Ancillary Facility Footprint be deferred to FR to be closed out with a co-located Waste Site? ☐ Yes ☐ No

References/Comments:
N/A

G. COPCs FOR SOILS AND STRUCTURES REMAINING AFTER DEMOLITION

What are the potential contaminants of concern for the remaining below-grade soil?

☒ None ☐ SVOC ☐ VOC ☐ Metals ☐ TPH ☐ Rad ☐ PCBs

☐ Other (Specify): _____

Comments:
No reviewed document confirmed the presence of any hazardous substance at the 1605-NE facility.

Summary of in-process soil sampling requirements:
N/A

Constituents detected / concentrations / rationale
N/A

Sample Collection Summary
No reviewed document provided sample information for the 1605-NE facility.

H. NOTES / ADDITIONAL INFORMATION

☐ Check here if additional information / data / maps / sketches are attached to this form.

If checked, list the attachment(s):
N/A

100-N ANCILLARY FACILITIES REMOVAL ACTION SAMPLING DETERMINATION FORM

Determination Number
SDF-100N-026

I. SAMPLING

Are soil samples required to demonstrate that remaining structure or below-grade soils meet cleanup standards? ☐ Yes ☒ No

Based on the above information it was determined that sampling: ☐ will ☒ will not be required in order to demonstrate that cleanup criteria have been met.

The individual below acknowledges that the review of this facility has been completed. He or she also commits to provide to the Department of Energy (DOE) and the Washington State Department of Ecology (Ecology) any available information that could alter the sampling decision established in this form.

Information Reviewer Signature	Printed Name	Date
David Warren	David Warren	8.6.12

The regulatory representative below agrees with the decision outlined in section I of this form for the indicated facility and supports implementation of that decision based on the information currently available.

DOE Signature	Printed Name RF Garcia	Date 8/6/2012
Ecology Signature	Printed Name Rick Bond	Date 8/8/2012

ERROR: undefined
OFFENDING COMMAND:

STACK:

Attachment 15

100K Area Unit Managers Meeting Status

August 9, 2012

RL-0012 Sludge Treatment Project

- TPA Milestone M-016-171 (Technology evaluation and report and new interim milestones for K Basin sludge treatment and packaging). This milestone is considered complete.
- TPA Milestone M-016-172 (Complete KOP Material Removal from 105-KW Fuel Storage Basin). Knock Out Pot material processing operations including the loading of Multi-Canister Overpack (MCO) baskets continued through the month with the third of five MCO's to be processed undergoing drying at the Cold Vacuum Drying Facility (CVDF).
- TPA Milestone M-016-173 (K Basin sludge treatment and packaging technology selection). A draft siting study that evaluated 22 existing nuclear facilities for the treatment and packaging of K Basin Sludge was prepared and is undergoing review. Technology evaluation of processes to be used for removing water from a sludge slurry stream to increase solids concentration for subsequent loading into drums is being evaluated. This work is currently unfunded for FY 2013.
- TPA Milestone M-16-174 (Complete Final Design of Sludge Retrieval and Transfer System). The formal review of the Engineered Container Retrieval and Transfer System (ECRTS) process final design started on August 6, 2012, in support of Optimization testing on mock up the sludge retrieval and transfer system and components continued.
- TPA Milestone M-016-175 (Begin Sludge Removal from 105-KW Fuel Storage Basin). Excavation for the KW Basin Annex has begun.
- TPA Milestone M-016-176 (Complete sludge removal from 105-KW). No change in status.
- TPA Milestone M-016-178 (Initiate Deactivation of 105-KW). The packaging and removal of remaining found fuel and fuel received from burial ground cleanup actions was completed and the material was shipped to CVDF, processed in CVDF, and shipped to CSB for interim storage. Documentation formally communicating the removal of found fuel from the 105-K W Fuel Storage Basin was submitted to RL on August 7, 2012.
-

RL-0041K Facility Demolition and Soil Remediation

Remedial Actions:

- Samples of waste site 100-K-62 verified that carbon-14 levels are below cleanup standards. The RSVP is currently under review by EPA.
- Area AA Zone 2 backfill was completed.
- Area AA Zone 1 backfill commenced. The schedule for revegetation was moved to November to take advantage of optimal seeding conditions.
- Verification sampling was completed for Area AG Zones 1 and 2 and the laboratory data is being validated. This data will support the closure of phase 1 waste sites 100-K-3, 100-K-69, 100-K-70, and 100-K-71 (Zone 1) and 100-K-36 and 100-K-3 (Zone 2).

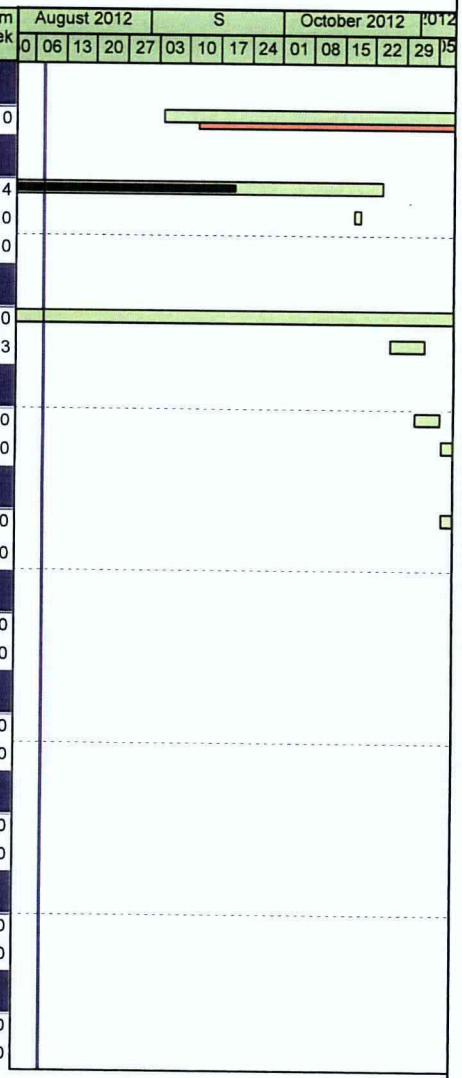
- The Remaining Sites Verification Package (RSVP) for waste sites 100-K-6, 132-KE-1, 100-K-62 and 100-K-46 (Area AH) is under review by DOE and EPA.
- The Remaining Sites Verification Package for waste site 100-K-53 is under EPA and DOE review. This RSVP documents the closure of waste site 100-K-53.
- The Remaining Sites Verification Package for waste site 100-K-63 is under comment incorporation.
- The Verification Sampling Instruction for 100-K-106 has been drafted and is in internal review.

Demolition:

- The 105KE water tunnel demolition was completed on 07/12/12. Piping disposal is expected to be completed with shipment to ERDF on 08/30/12. The anticipated completion date for the Removal Action Report (RAR) is 10/5/2012. Work is continuing on the size reduction of piping and metal for the 183.2 Sedimentation basin. The RAR to support closeout of 183.2 and 183.7 is being drafted with an expected completion date of 9/13/12. Initial results of concrete samples and soil samples from potholes indicate that the concrete and soils meet the RAOs. Results of duplicate samples are pending.
- At 190KE analyses showed concentrations in the concrete slightly above soil cleanup levels (direct exposure and river protection) for hexavalent chromium. The partitioning coefficient (K_d) in concrete for hexavalent chromium is 870 mL/g, rendering it immobile in the concrete matrix. Therefore it is not expected to present a risk to human health or the environment. The RAR will be prepared and provided to DOE and EPA for review on Sept ^{4th}.

Attachment 16

Activity ID	Activity Name	TPA (?)	Remaining Duration	Physical % Complete	Start	Finish	Delta from Last Week
118-K-1 Remediation/Closeout							
4000S910	Closeout Documentation Excluding Trench "...	Y	53.0	0%	04-Sep-12*	06-Dec-12	0
600-29 RTD-REA-118 (TPA-MS)							
4000S960	Closeout Documentation	Y	43.0	76%	06-Jun-12 A	23-Oct-12	4
4000S970	Backfill	Y	2.0	0%	17-Oct-12*	18-Oct-12	0
4000S980	Revegetation	Y	4.0	0%	19-Nov-12*	27-Nov-12	0
128-K-2 RTD-REA-118 (TPA-MS)							
4000S1010	Closeout Documentation	Y	67.0	15%	10-Jul-12 A	06-Dec-12	0
4000S1020	Backfill	Y	5.0	0%	25-Oct-12	02-Nov-12	3
100-K-93							
4000S1060	Excavation/Loadout 100-K-93	Y	3.0	0%	31-Oct-12*	05-Nov-12	0
4000S1130	Work Instructions 100-K-93	Y	75.0	0%	06-Nov-12	26-Mar-13	0
100-K-87							
4000S1070	Excavation/Loadout 100-K-87	Y	3.0	0%	06-Nov-12*	08-Nov-12	0
4000S1180	Work Instructions 100-K-87	Y	75.0	0%	12-Nov-12	01-Apr-13	0
100-K-91							
4000S1080	Excavation/Loadout 100-K-91	Y	3.0	0%	12-Nov-12*	14-Nov-12	0
4000S1230	Work Instructions 100-K-91	Y	75.0	0%	15-Nov-12	04-Apr-13	0
100-K-95							
4000S1090	Excavation/Loadout 100-K-95	Y	4.0	0%	15-Nov-12*	26-Nov-12	0
4000S1280	Work Instructions 100-K-95	Y	75.0	0%	27-Nov-12	11-Apr-13	0
100-K-84							
4000S1100	Excavation/Loadout 100-K-84	Y	19.0	0%	27-Nov-12*	02-Jan-13	0
4000S1330	Work Instructions 100-K-84	Y	75.0	0%	03-Jan-13	15-May-13	0
100-K-86							
4000S1110	Excavation/Loadout 100-K-86	Y	4.0	0%	03-Jan-13*	09-Jan-13	0
4000S1380	Work Instructions 100-K-86	Y	75.0	0%	10-Jan-13	22-May-13	0
100-K-92							
4000S1120	Excavation/Loadout 100-K-92	Y	3.0	0%	10-Jan-13*	15-Jan-13	0
4000S1430	Work Instructions 100-K-92	Y	75.0	0%	16-Jan-13	29-May-13	0

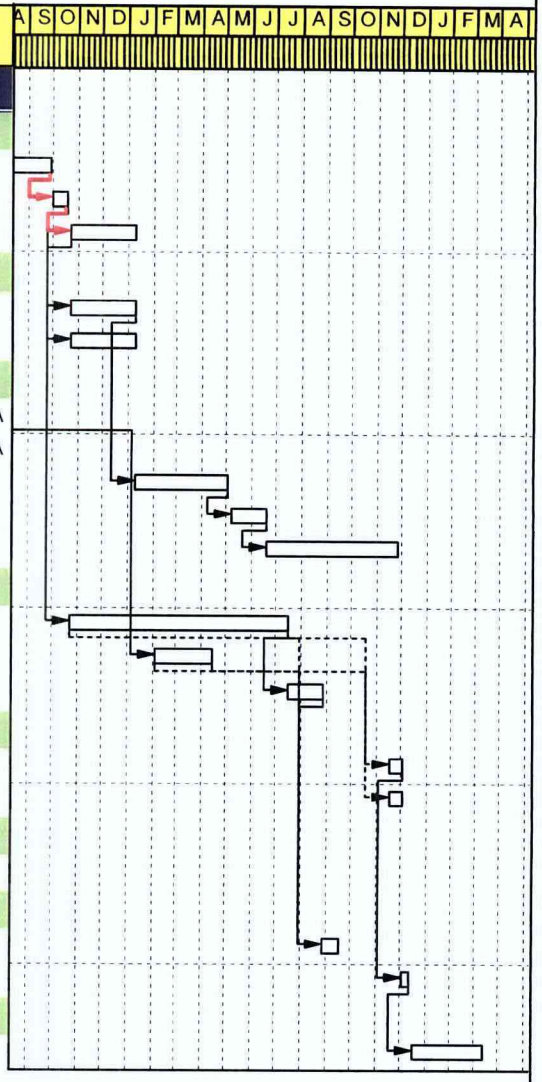


SPIF | Remaining Work | Milestone
Actual Work | Critical Remaining Work | % Complete

TASK filter: POW Format - 3 Month Window.

Attachment 17

Activity ID	Activity Name	RD	% Comp	Start	Finish
Field Remediation - Rob Cantwell					
Excavation					
FR3810	PSR Preparation	43	0%	16-Jul-12*	27-Sep-12
FR3770	Re-Mob for West Wall Excavation	12	0%	01-Oct-12*	18-Oct-12
FR3560	Exc 100-C-7:1 West Wall Plume (125,000 BCMS)	42	0%	22-Oct-12	09-Jan-13
Loadout					
FR3760	100-C-7:1 West Wall Plume Loadout (94,000 Tons)	42	0%	22-Oct-12*	09-Jan-13
FR3780	Remaining 100-C-7:1 ACL Stockpile Loadout (50,000 Tons)	42	0%	22-Oct-12	09-Jan-13
Closure Documents and Sampling					
FR1040	Prepare Closure Document 100-C-7	0	100%	19-Apr-12 A	27-Jun-12 A
FR3790	Prepare Verification Work Instruction 100-C-7:1 Stock Pile Areas	0	100%	12-Jun-12 A	28-Jun-12 A
FR3570	Prepare Verification Work Instruction 100-C-7:1 West Wall	64	0%	10-Jan-13	02-May-13
FR3580	Closure Sampling and Analysis 100-C-7:1 West Wall	26	0%	06-May-13	19-Jun-13
FR3590	Prepare Closure Document 100-C-7:1	89	0%	20-Jun-13	26-Nov-13
Backfill					
FR3600	Backfill 100-C-7:1	145	0%	22-Oct-12	15-Jul-13
FR1080	Backfill 100-C-7	40	0%	04-Feb-13*	15-Apr-13
FR3820	Backfill 100-C-7:1 West Wall Plume	25	0%	16-Jul-13	27-Aug-13
Reveg					
FR1090	Revege 100-C-7	8	0%	18-Nov-13*	03-Dec-13
FR3610	Revege 100-C-7:1	8	0%	18-Nov-13*	03-Dec-13
Powerline Relocation					
MS1040	MSA Removal and Disposal of Powerlines	6	5%	20-Jun-12 A	19-Jul-12*
600-253 - Pit 24					
FR3620	Recontour 600-253 (Pit 24)	10	0%	28-Aug-13	16-Sep-13
FR3630	Reveg 600-253 (Pit 24)	6	0%	04-Dec-13	12-Dec-13
Final FR Punch List					
FR3690	Final FR Punch List (Remove Trailers, CTA, Lay-down Yard, Miscellane...	48	0%	16-Dec-13	13-Mar-14



Critical Remaining Work ◆ Milestone
Current Bar Labels % Complete

TASK filter: EPA Schedule View.

Attachment 18

300 Area Closure Project Status
August 9, 2012
100/300 Area Combined Unit Manager Meeting

Ongoing Activities

- Completed backfill of all available waste sites north of Apple St.
- 309 Reactor – Fuel Examination Cell successfully removed, packaged and shipped to ERDF.
- 340 Complex – Waste site remediation nearly complete, excavation of vault transport ramp ongoing. Preparations for vault removal ongoing.
- 3730 – Continue hazardous material removal and hot-cell stabilization preparations.
- 308A – Completed below-grade demolition and site preparation. Site turned over to subcontractor for TRIGA reactor removal.
- 321 – Remediation excavation at design limits, plume continues to the south. Will now require removal of 323 below-grade tanks before resuming plume chasing.
- 323 – Completed pump-out and shipment of water from four below-grade tanks. Demolition and tank removal to follow.
- Initiated asbestos abatement in 337B caisson.
- Slab removal west of Alaska completed.

Demolition & Remediation Preparation Activities

- Initiated process sewer (300-15) remediation north of Apple St.
- Initiated 310 TEDF above-grade demolition.
- Preparations for demolition of the 329 Building nearly complete.
- Preparations for demolition of the 382 Complex ongoing.
- Resume characterization of the 326 Building.

60-Day Project Look Ahead

- Continue authorization reviews for asbestos abatement activities.
- Continue 340 Complex waste site remediation and mobilize equipment for vault removal.
- Mobilize for TRIGA reactor removal.
- Continue north of Apple process sewer (300-15) remediation.
- Continue 309 reactor removal activities.
- Complete 310 TEDF demolition.
- Initiate 329 Building demolition.
- Initiate and complete 382 Complex demolition.
- Issue Request for Proposals for last remediation procurement south of Apple St.

300 Area Closure Project Status
August 9, 2012
100/300 Area Combined Unit Manager Meeting

Ongoing Activities

- Completed backfill of all available waste sites north of Apple St.
- 309 Reactor – Fuel Examination Cell successfully removed, packaged and shipped to ERDF.
- 340 Complex – Waste site remediation nearly complete, excavation of vault transport ramp ongoing. Preparations for vault removal ongoing.
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- 323 – Completed pump-out and shipment of water from four below-grade tanks. Demolition and tank removal to follow.
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- Slab removal west of Alaska completed.

Demolition & Remediation Preparation Activities

- Initiated process sewer (300-15) remediation north of Apple St.
- Initiated 310 TEDF above-grade demolition.
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- Preparations for demolition of the 382 Complex ongoing.
- Resume characterization of the 326 Building.

60-Day Project Look Ahead

- Continue authorization reviews for asbestos abatement activities.
- Continue 340 Complex waste site remediation and mobilize equipment for vault removal.
- Mobilize for TRIGA reactor removal.
- Continue north of Apple process sewer (300-15) remediation.
- Continue 309 reactor removal activities.
- Complete 310 TEDF demolition.
- Initiate 329 Building demolition.
- Initiate and complete 382 Complex demolition.
- Issue Request for Proposals for last remediation procurement south of Apple St.

Attachment 19

Environmental Protection Mission Completion Project
August 9, 2012

Long-Term Stewardship

- The consolidated Revision 0, 100-F/IU-2/IU-6 – Segment 3 turnover and transition package was submitted to RL on July 17, 2012.
- Initiated drafting of the 100-F turnover and transition package.

Remedial Investigation of Hanford Site Releases to the Columbia River

- Meetings were held on 7/26/12 and 8/2/12 to review redline sections of the Rev. 0 human health risk assessment report. The remaining sections will be sent out for review via email during August with a final meeting planned for 9/6/12.

Document Review Look-Ahead

- None